

MINDFUL L... WORKBOOK OF
SELF ENQ... THE FELLOWSHIP

Lifeforce + Lifestyle

PRACTICAL TEACHINGS OF
ATHARVAVEDA AND AYURVEDA

by
SWAMI VIDYADHISHANANDA

Lifeforce + Lifestyle

PRACTICAL TEACHINGS OF
ATHARVAVEDA AND AYURVEDA

A MINDFUL LIVING WORKBOOK OF
SELF ENQUIRY LIFE FELLOWSHIP

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Santa Barbara, California

2014

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Second Edition, November 2014

Lifeforce + Lifestyle – Workbook of Self Enquiry Life Fellowship.

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Questionnaire on Ayurvedic Dosha Constitution (pg. 21), Vegetable Juicing Guide based on Dosha Constitution (pg. 90) and Food guidelines for Ayurvedic Dosha Constitution (pg. 115) co-written by Jennifer Ayres, who has studied with Dr. Vasant Lad of the Ayurvedic Institute in Albuquerque, New Mexico, USA.

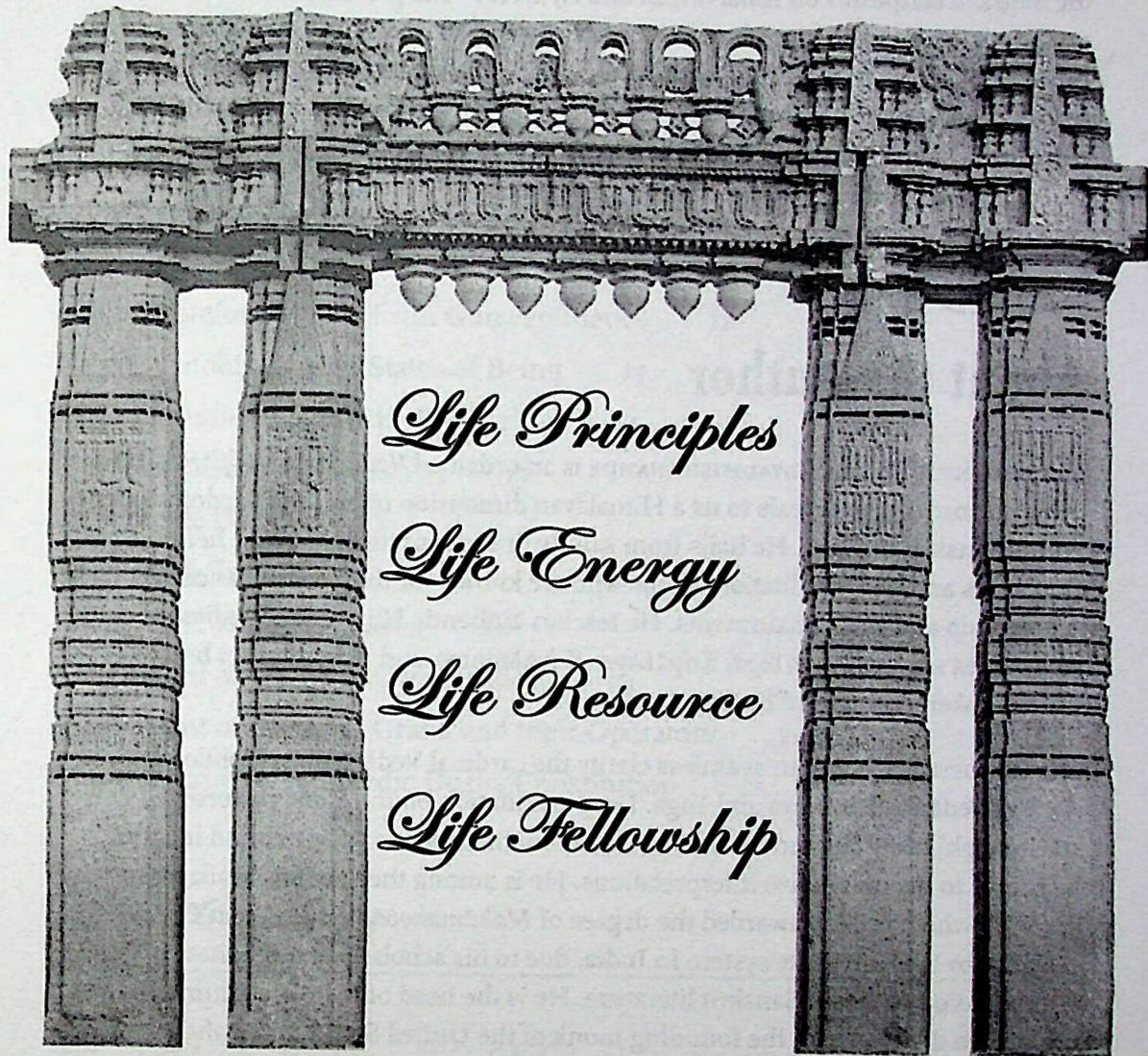
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✧ About the Workbook ✧



*T*his is not simply a handbook. This is a practical workbook. It is also a work-in-progress as the components have the potential to develop into individual books, for example a cookbook based on a soli-lunar diet covering the salient features of food prepared as a sacred offering or *naivedyam*. Presented in this workbook of the nonprofit organization, Self Enquiry Life Fellowship, is an introductory manual for a high energy lifestyle conducive to mindful living and harmonious with the natural principles of life. The workbook was first introduced as

reading material to supplement the direct instructions in a retreat on "Lifeforce & Lifestyle." All the relevant details for a daily discipline towards a meditative lifestyle are captured in a structure that resonates with the four pillars of the Swamahiman gateway pictured on the previous page. Life Principles, Life Energy, Life Resource and Life Fellowship constitute the four major sections of this workbook. Furthermore, the section on Life Energy about *prāna* is clearly delineated into four pillars: Biorhythms, Balancing Breath, Balancing Drinkables and Balancing Edibles. Teachings in this workbook draw upon careful interpretation and practical experience from translating the Sanskrit scriptures on Atharvaveda and Ayurveda. The presentation is styled based on the curriculum teachings by His Holiness Swami Vidyadhishananda through the fellowship classes of Self Enquiry Life Fellowship. The intention is to articulate a high *prānic* lifestyle rooted in mindfulness and compassion as rendered by the classical teachings of ancient lineages of meditation.



About the Author

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His Holiness teaches with seamless clarity the cardinal Vedic Sanskrit philosophies, such as Vedanta, Samkhya and Yoga. Deep meditation on the Sanskrit verses of these spiritual philosophies and monastic enquiry methods led to the profound insight he brings to his meditative interpretations. He is among the very few available in the West who has been awarded the degree of *Mahāmahopādhyāya* (Great Ordained Teacher) by the university system in India, due to his scholarly and meditative interpretation of extant Sanskrit literature. He is the head of the Swamahiman mission to the West and the founding monk of the United States nonprofit organization, Self Enquiry Life Fellowship.

— Visit www.swamahiman.org to learn more.

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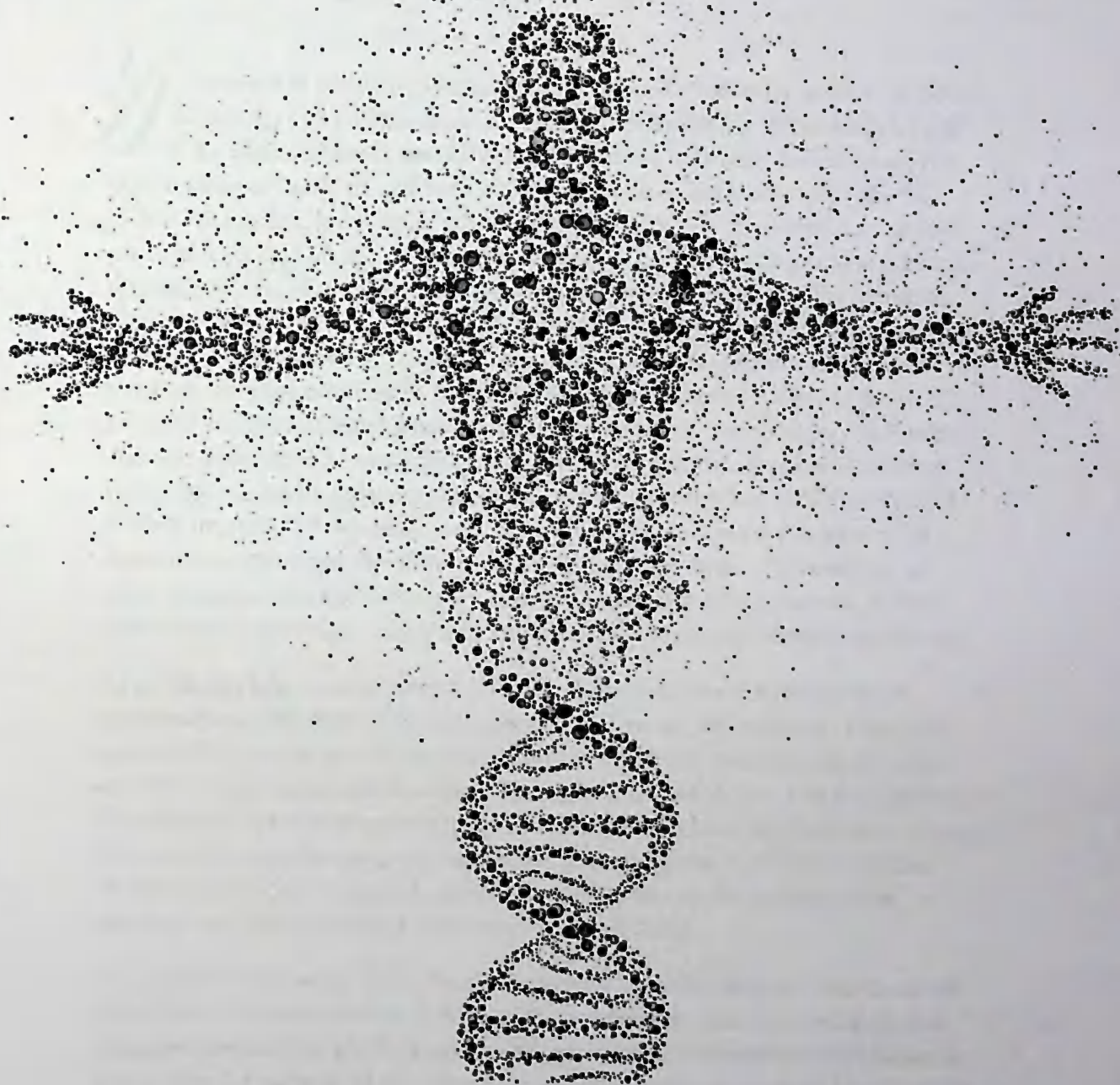
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Life Principles





Subtle Building Blocks of Life

Root of life sciences

Ayurveda is uniquely positioned as it is embellished by the wisdom of both philosophy and practice from diverse Sanskrit literature. While AtharvaVeda is the well-established parent Vedic literature of Ayurveda, both the cardinal philosophies of Samkhya and Yoga make a major contribution to Ayurveda. Of course Ayurvedic classics stand apart due to their own dedicated literature on the practical teachings on life and longevity. Ayurvedic culture forms a bridge that links diverse branches of the Vedic heritage while imbibing the cream of the Sanskrit texts and verses. Outside the realm of being the extant resource on the science of health and mindful living, Ayurveda bases its ethos fundamentally on the basic tenets of Samkhya philosophy. Therefore, the usage of concepts such as the *guṇa* (material constituents) and *bhūta* (elements) in Ayurveda are based on the Samkhya doctrine. More abstract concepts such as the *tanmātra* (subtlest material cause of elements) and *tattva* (existent principles) as well as the fundamental definition of Prakriti (matter) and Purusha (consciousness) of course remain the same in all Sanskrit literature, and therefore are not just specific to Ayurveda. However, no other literature uses such a unique definition of *dosha* besides Ayurveda. A *dosha* combination referring to mind/body constitution is verily an Ayurvedic application.

Ayurveda has been around since the advent of the Veda, the earliest Sanskrit compendium, and other Vedic Indic systems of cardinal philosophies. This great science of life and longevity has had periodic resurgences, even though the older treatises are lost to historical turmoil. The eight branches of texts and the eightfold classification based on diagnosis/treatment in Ayurveda have developed and adapted to challenges over thousands of years since Vedic antiquity. It is well known that Ayurvedic physicians retreated into the Himalayan terrain for conferences to reassess healthful approaches to wellness and well-being.

The great Charaka wrote in his Ayurvedic treatise Charaka Samhita, “that is named the science of life wherein are laid down the good and the bad life, the happy and unhappy life, and that which is wholesome and what is unwholesome in relation to life, as also the measure of life.” Similarly, the great Vagbhata wrote in his Ayurvedic

classic Ashtanga Hridayam, “neither too concise nor too copious, Ashtanga Hridayam is compiled based on the extract of the essence of all the subjects scattered in various treatises. May the world enjoy full happiness from the merit that is obtained by compiling this Hridayam – the heart of the ocean of the literature of the whole of Ayurveda.”

≡ *Bounds of Tattwa*

Often, philosophical concepts are rendered abstract, especially whenever they are taught or interpreted without the realization of the fundamental principles. In the Sanskrit tradition, philosophy is better understood as ‘being by again seeing’ (or to see is to be), and therefore, implies wisdom that is realized incontrovertibly. The intuition must result in realization that is free from any doubt or hesitation. This paradigm applies to the definition of *tattwa*, which is fundamental to all Sanskrit philosophies. A *tattwa* means a constituent principle. It is implying an entity. A *tattwa* exists and can be realized. It is not a mere abstract concept. A *tattwa* can be very subtle and makes up our own internal instruments of knowing. In fact, our own intellect, ego and mind are separate *tattwa*.

There are two separate ultimate *tattwa* that are beyond space and time! Both the Purusha (conscious entity) and the Prakriti (strictly the unmanifest matter) are separate *tattwa*. They are existent principles related as the ever-manifest knower and the knowable. The alignment or the ‘seeing’ from the association of Purusha and Prakriti is without a beginning (or end) and is not without a cause. The effect of this association is a phenomenal being, and the chain of such phenomena is eternal. Only a full discriminative realization of the true ‘seer’ (that it is not the intellect or ego) and the ‘seen’ as being separate *tattwa* can bring about complete liberation and hence the release from the phenomenal being. There is no unknown phenomenon. In other words there is a knower or a seer behind every phenomenon. Therefore, in creation there is always an overlord whose willpower or demiurge is behind the created inanimate objects. Even though a human mind might not be able to know the true properties of a particle (or a wave), such as a quark or a Higgs-Boson etc., there is at least one knower whose mind is imbued with the knowing behind such evolutionary ‘parts and partitions’ of matter (Prakriti). Herein, the smallest particle or the God-particle for that matter could also be deemed a *tattwa*, as an existent but elusive principle.

Consciousness is discrete and countless in number. Countless seers manifest innumerable lights. Similarly countless stars light up the otherwise dark night sky. It is matter which is one, making all energy linked and transmissible. Matter is dark unless lit by the consciousness that is the seer. Matter is the knowable when lit by alignment with consciousness. When matter reflects the light of consciousness through their alignment, we strive to shatter the ignorance inherent in the shadows and the shades around light. The seer is the light in the heart. The seer is discrete. The seer is the knower. Ignorance is commonplace. Ignorance is akin to darkness. Ignorance is widespread. Collective ignorance is easily garnered. There is no

collective consciousness. Instead, the absolute knower or the conscious entity (Purusha) is immutable and not a temporal object; it is singular and infinite.

It is Prakriti or primordial nature which is one, unmanifest but set into evolution when in alignment with a seeing entity. As the conscious being is a product of the seer and the seen, with the intellect as the first evolute, there is no way to categorize a sustainer-sustained relationship between the two entities. Both Purusha and Prakriti are beyond space and time, whereas the embodied being (or the inquirer) is bound by space-time coordinates! The primordial material cause is the Prakriti, a state from which all discrete entities evolve and unto which all merge, until they emerge at a later time. Some beings are embodied in space-time coordinates wherein inanimate objects come about due to the mental prowess of greater beings; the overlord of our solar system is one such being who is capable of creating elements that evolve.

God and the overlords of parallel universes are all a product of Purusha and Prakriti. How Prakriti is all one and the same energy (in all of these boundless universes) is often undecipherable due to the difficulty of conceptualizing an entity that is beyond space and time. An embodied being cannot figure out how innumerable conscious entities and one primordial nature came about! Through all of the cycles of creation and dissolution, Prakriti remains indiscrete. Separate entities and conscious beings are discerned only due to the discreteness of consciousness and not the primordial matter. Once again, consciousness is innumerable and matter is all one, and both are beyond space and time! Moreover, all conscious entities must be identical so that Purusha is countless and separate but identical. This is the Samkhya catechism wherefrom Ayurveda starts its analysis.

ॐ *Binding constituents of matter*

Our thoughts exist in time, and they limit one another by their sequence. There is verily only one thought at a time! The thoughts typically vary from repetition of a single thought construct, as in meditation or deep contemplation, to mundane or trivial levels. When these thoughts are scrutinized, they are deduced to be bound to three primary categories: they are cognized, seem to shift or change, and either seem to be revealed from nowhere or correlate with some previous memory. Even though thoughts are easy to examine when it comes to cognition, mutation, and retention, these three states are what characterizes the binding material constituents of matter. Ayurveda relies on the dictum that our thoughts mutate, just as DNA mutates. In fact, everything in nature (or for that matter, the whole world) mutates and thereby oscillates. Herein *guṇa* does not mean a predicated property of matter, but it means that which inherently binds matter. Prakriti is therefore a primordial state of nature when these three binding constituents are in a state of equilibrium. The very act of seeing disturbs this equilibrium and the sequential overpowering of these constituents sets evolution into motion. Prakriti is then said to be *Vikriti*, or not the original state of matter.

These essential binding constituents of matter are known as the *guṇa*. The three binding constituents are Sattwa, Rajas, and Tamas, imbuing the quality of expression or manifestation, conation or mutation, and impression or retention, respectively. Closer scrutiny reveals that intellect, ego and mind are the respective evolutes from these three *guṇa* in Prakriti upon being seen by the consciousness or Purusha. The intellect is essentially the awareness that is at the root of all perceptions. The consciousness is only a witness. Who we are and how we think are then based on the make-up of the triad of the first series of evolutes: the intellect, ego and mind. Naturally, the intellect is related to sentience, the ego is willing and is prone to mutation, and the mind is able to sustain impressions.

Material constituents of all that we see and experience starting from the intellect down to the elements (*bhūta*) of creation, their derivatives, and mundane objects are essentially the combination of expressive manifestation, mutative action, and retentive inertness. Notably these three *guṇa* constitute the foundational braid that intertwines to form the core of matter. When matter is not evolving and returns to its unmanifest state, the three *guṇa* remain in a state of equilibrium, only to be disturbed by the act of seeing by the consciousness after which matter starts evolving. This evolution is only possible by the interplay of these three inherent material binding constituents, which take turns in subjugating due to the lack of equilibrium. In other words dominant Sattwa yields Rajas which then causes a mutative change only to be stored as latency by Tamas. These three steps occur at either a very fast or a slow pace based on the nature of the substrate. They interleave within each other and evolve as in a hologram within a greater hologram. Thus for a single thought, there is the cognition and pleasure attendant with it; thereafter there is mutative modification which brings in pain; and finally the benumbed state provokes stupefaction and the experience is stored as a memory (for later recollection). Right from the thought level to the creation of mundane objects for everyday use, this evolutionary sequence continues to play out. In evolution, the steps are discrete howsoever minimal the mutation!

Functional cellular intelligence

A virus could be rapidly mutating and then become dormant, and again be known through its expression (infection). Herein, Rajas, Tamas and Sattwa are played out as per the evolutionary scheme. While Rajas connects with both Tamas and Sattwa and can act rather quickly, there is not an immediate connection between Tamas and Sattwa – there is a gap, because they are mutually antipodal. Rajas *guṇa* assists in this relationship by being in the middle. The virus by its very nature is a rapidly mutative organism. Therefore, it dictates the need to strengthen the nascent immunity of the cell. Attacking the virus stokes its mutative tendencies and creates more problems, including newer varieties of diseases. A newer vaccine does not address the cause especially if we keep on trying to annihilate the virus. There is no possibility of total annihilation! The virus will simply mutate and adapt. A new variation of the disease is then provoked. Antibiotics are not able to touch the virus,

and negatively affect us by reducing our good bacteria population. In this way cellular intelligence is affected. It is said that more than ninety percent of the cells in the human body are microbial cells. Furthermore, there are about ten bacteria in the human body for every cell. This is why Ayurveda puts emphasis on steamed fermented foods which assist in increasing the good bacteria. Ayurveda recognizes this issue of virus mutation and advises to not only strengthen the nascent immunity of the cell, but also to focus on preventing the virus from attaching to the cell membrane. Hence the concept or treatment approaches that focus on changing the cell adhesion proteins bear immense importance in the modern context.

Once the subtle realms, or *tattwa* (24 of matter plus the consciousness, totalling 25 in all) cross from the stage of five elements into the formation of a zygote, a holistic marker that retains the essential thesis of the *tattwa* paradigm is adapted to clearly delineate the cellular and molecular tendencies. This principle is then captured as a functional intelligence or *dosha*. As they formulate a counterpart triad that balances the *guṇa*, they are termed as *dosha* or what is counterbalancing the core attributes. Thus, Vāta (V), Pitta (P) and Kapha (K) are the *dosha* found as subtle energies present in every cell of the body. They are found in aggregate combinations such as in physical organs. Moreover, they characterize cellular function even at the molecular level. For example, cholesterol is considered a Kapha molecule. The whole body evolves from the zygote and its original value of VPK, and thus begins the evolutionary mechanism of the body. In a way this is the starting point of the gross body, and therefore this nascent and unique combination ascribed to the original VPK ratio is termed as Prakriti; whereas our deviation (evolution) from this rhythm is captured by the term Vikriti. This nomenclature is clearly synergistic with the Samkhya terminology. Vikriti is then able to measure the deviation from the original balance, and a proper radial pulse diagnosis can provide insight to an expert Ayurvedic practitioner about the degree of deviation. Naturally, depending upon the Vikriti combination of VPK, acute or chronic states of disease can be determined, and treatment plans to return the mind/body to the Ayurvedic Prakriti allows the sufferer to reclaim or approach the original balance.

Like the infinite combinations of the three *guṇa*, there are essentially innumerable combinations of the three *dosha*. Each conscious being is a unique combination of VPK Prakriti, even though comparable ratios of the VPK cause similar health tendencies, as would be expected with twins. Most have a primary *dosha*, some have two in equal proportions and rarely, as in the case of a born saint or monk, all three *dosha* show equal levels. Vāta is generally known as the airy humour and the principle represents the energy of movement. Thus Vāta is related to *prāṇa*. Pitta is the fiery humour expressed through the *jatharāgni* (digestive fire) and the principle represents the energy of metabolism. Lastly, Kapha is the watery humour and this principle represents the energy of lubrication. The three *dosha* influence all that we eat and drink, and all the tendencies and patterns of thinking and doing. The *tridosha* governs all aspects of the biological and psychological processes of body and mind – therefore a VPK value of Prakriti (at conception) is verily the central

marker of Ayurvedic mind/body constitution. Essentially the *guṇa* can be fully complemented by the *dosha*. Thus we have six variables which can categorize all aspects of life and longevity.

In this context, it is easy to consider Vāta as regulating the *prāṇic* energy (using the breath) in the body, because it brings about degenerative processes towards the end of life (for example, post-menopausal period in women), whereas Pitta and Kapha are connected with *agni* (positive ions) and *soma* (negative ions) respectively. All three humours help to open up *nādi* through balance, or clog the *nādi* through imbalance. Herein *nādi* in an Ayurvedic context is more than just nerves; it implies energy conduits including the lymphatic and blood vessels. The *sushumnā nādi* typically refers to the cerebrospinal fluid (CSF) channel in the spinal cord. Often *nādi* is also used as a unit of time, and this highlights the importance of Sanskrit concepts and their correlated meaning.

≡ Elements and their causes

Whatever is knowable in the world (our own bodies in addition to external objects) falls within the five gross elements, namely, void of space or ether (*ākāsha*), air (*vāyu*), fire (*tejas*), water (*āpa*) and earth (*kshiti*). A careful analysis of the external material objects and our physical body counterparts reveals that these five elements (*bhuta*) combine to create them. Herein *ākāsha* is that mutable non-living entity whose activity is sensed by the ear as sound; *vāyu* is that mutable non-living entity whose activity is the tactile sensation of heat/cold felt by the skin; *tejas* is that luminous mutable non-living entity sensed through the eyes as form; *āpa* is that mutable non-living entity sensed by the tongue as taste (*rasa*); and *kshiti* is that mutable non-living entity sensed by the nose as smell. We relate to the external objects through our five subtle organs of sense perception for detecting by hearing, touching/feeling, seeing, tasting and smelling. With respect to these elements, one must be careful in distinguishing the gross physical perception of liquid and solid etc. In other words, the elemental form should not be confused with commonly used meanings of gaseous, liquid or solid. For example, *kshiti* is the earthy material that possesses the sense of smell and not just any solid. These five *bhuta* constitute the external knowables as well as combine into three basic energies of the functional principles or the three *dosha*: Vāta, Pitta and Kapha.

The purpose of presenting the elements in this light is to clearly understand the cause of these elements and their relationship with the senses. That measure alone or *tanmātra* is the cause of the *bhuta*. Corresponding to the five *bhuta* there are the subtle monads of *tanmātra*. In this sequence, *ākāsha* arises from the sound *tanmātra*; *vāyu* arises from the thermal *tanmātra*; *tejas* arises from the form *tanmātra*; *āpa* arises from the taste *tanmātra*; and *kshiti* arises from the smell *tanmātra*. One could conclude that *tanmātra* is itself the energy of perception and thus empowers the subtle organs of sense perception with the energies of hearing, touching/feeling, seeing, tasting and smelling. The existence of *tanmātra* can be deduced in deep meditation wherein subtle objects are reconstructed in the mind

due to the energy of *tanmātra*; no verbal cognition (name and form relationship) are used when the subtle object is recreated in the mind in advanced meditation. For example, only when a rose is recreated in the mind (bereft of the lingering memory of the gross object rose) can the root of its aromatic smell or soft feeling to the touch be properly known. A meditator then concludes that the essence of the rose or its *tattwa* is known. Until then the rose is given such a name attributing to a particular combination of smell and touch.

The first of the five, the *shabda tanmātra* therefore means subtlest sound or that which has the minutest quality of sound; it does not mean smallest particle or a molecule or an atom etc. Gross qualities of sound are made up of countless minute identical qualities. Gross sound arises from a collective mass, the smallest part of which is the sound *tanmātra*. The same analogy holds true for the other four *tanmātra* – *sparsha* (minutest quality of thermal touch), *rupa* (minutest quality of form), *rasa* (minutest quality of taste), and *gandha* (minutest quality of smell). It is based on this definition of *rasa tanmātra* that Ayurveda expands its reach to taste and alchemy among other applications. The *tanmātra* does not give rise to pleasure, pain or trauma as they are indistinct and indistinguishable. Those feelings arise from the aggregate of sound, etc., but not from the minutest quality because there remains no distinction between one sound or another, and so on and so forth for other *tanmātra*. Each of the five gross elements has at their root a *tanmātra*. A *tanmātra* is the smallest material cause of the corresponding gross element. The five elements in turn combine to yield the *dosha*. The relationship of senses, *tanmātra* and *bhuta* is central to developing a profound understanding of Ayurvedic mind/body *dosha* constitution. The entire sequence of the subtle material constituents of *guṇa* to the triad of *dosha* allows the seeker to comprehend the transition of the subtle world of evolution into the graspable gross world of mind/body parameters.

❧ Back to the lifeforce

Samkhya philosophy summarizes the 24 *tattwa* as: Pradhāna (Prakriti that is primordial or unmanifest matter); intellect; ego; mind; five *tanmātra*; five subtle organs of sense perception or *jñānendriya*; five subtle organs of motor action or *karmendriya*; and five *bhuta*. The 25th principle is Purusha or consciousness itself. One might note that the five *prāna* or the vital lifeforce are deemed as relatively external, and are common to all senses. The innate urge for nourishment through breath, drinkables and edibles is known as *ājīrshabodha* which is the main function of *prāna*. The fivefold *prāna* is the sole sustaining power that maintains the body. The sustaining lifeforce energy (from external sources) brings about rejuvenation through satiation by air, thirst and hunger.



Evolution from Prakriti

The chart exhibits an example of how the three binding constituents (*guṇa*) of Prakriti combine in their respective proportions to evolve into three stages of subtle matter when aligned with the conscious entity. A score of 3 in the chart indicates that this particular binding constituent is dominant. The three evolutes are then imbued with the light of consciousness. Herein, only the Purusha is conscious and manifest as the eternal knower, whereas the Prakriti is the unmanifest matter and evolves as the knowable (*Vikriti*). The intellect, ego and mind are the first three evolutes which comprise the *chitta* (mind-stuff) and make up the subtle heart.

	Sattwa	Rajas	Tamas	
Purusha +	3	1	1	= Mahat (Intellect)
Purusha +	1	3	1	= Ahamkāra (Ego)
Purusha +	1	1	3	= Manas (Mind)



Characteristics of Guṇa

The table promotes an understanding of the three-fold modification of a general property based on how it relates to a particular binding constituent or *guṇa*. The modification in each row shows the evolution of the same theme as it relates to each of the three *guṇa*. For example, pleasure, pain and trauma represent a set of background states based on the dominance and subversion of each *guṇa* sequentially; thus when *tamas* is prevailing, stupefaction or trauma results. Sattwa and Tamas are antipodal and transition through Rajas.

Sattwa	Rajas	Tamas
Sentience	Action	Sustenance
Expression	Mutation	Impression
Manifestation	Modification	Latency
Cognition	Conation	Retention
Sentient	Mutable	Static
Formation	Development	Maintenance
Perceivability	Mutability	Inertness
Pleasure	Pain	Stupefaction



Subtle Emotional States from Guṇa Influence

The table presents the eight-fold nature of the intellect (*buddhi*) in its two opposite states of subtle emotions (*bhāva*), represented by the Sāttwika column and the Tāmasika column. The Rājasika column represents their intermediates. The three columns show how the functions of intellect, ego and mind are related to the states achieved by the interplay of *guṇa*.

Sāttwika	Rājasika	Tāmasika
Unalloyed piety along with kindness and charity	Piety mixed with impiety	Impiety
Discriminative enlightenment	Common knowledge	Ignorance or false knowledge
Dispassion leading to liberation	Ordinary detachment	Attachment
Yogic supernormal powers	Supremacy in mundane affairs	Lack of powers, submissiveness


When an activity is undertaken involving knowledge or effort, the experience leaves an impression in the mind which then becomes 'latent' until retrieval at a later time. Such latent impressions are known as *samskāra*, and are stored in the *chitta* of the subtle heart. If we consider the states mentioned in the table above as arising due to latent impressions of mind, then they can be represented anew as shown below.

Sāttwika	Rājasika	Tāmasika
Piety and nobility due to <i>dharma</i>	Effort towards <i>dharma</i>	Lack of adherence to <i>dharma</i>
Higher knowledge maturing into wisdom	Desire to know and honouring knowledge	Ignorance
Dispassion (and hence compassionate)	Tendency towards detachment	Attachment
Opulence in divine affairs	Opulence in mundane affairs	Non-divine pursuits



Nature Unfolds to Nine States of Being

The chart shows personality traits and behavioural tendencies that come forth when the three *guṇa* (binding constituents) and the three *dosha* (functional principles of mind/body constitution) combine. Evolution from Prakriti creates these nine groups of qualities in individuals.

 Dosha	Guṇa		
	Sattwa	Rajas	Tamas
Vāta	Clarity Creativity Lightness	Nervousness Anxiety Fear	Confusion Indecisiveness Sadness
Pitta	Quick comprehension Subtle understanding Remembrance	Aggressiveness Competitiveness Hunger for power	Anger Hatred Jealousy
Kapha	Forgiveness Loving presence Compassion	Possessiveness Attachment Greed	Numbness Depression Coma



Types of Bodies during Life & Afterlife

The table exhibits the types of bodies, subtle and gross, emanating from the five *tanmātra*, which are the subtlest energies in creation. The five-fold *tanmātra* gives rise to five-fold *bhuta* or elements in creation; namely, space (or ether), air, fire, liquid and solid. From elements arise gross external creations, which are of two kinds: bodies of organisms and inorganic objects. The subtle bodies are assumed by the conscious living being after death until the next birth in a gross body (represented below as 'Human' and 'Tiryaka'). Complete liberation implies lack of any type of body, subtle or gross.

Subtle Bodies (8 kinds)	Gross Bodies (2 kinds)	
	Human	Tiryaka
Brāhma Prājāpatya Aindra Paitra Gāndharva Yāxa Rāxasha Paishācha		Stationary Mobile
		Trees & Plants Mammals Birds Reptiles Amphibians Fish Insects Invertebrates



Five-fold Rhythm in Evolution

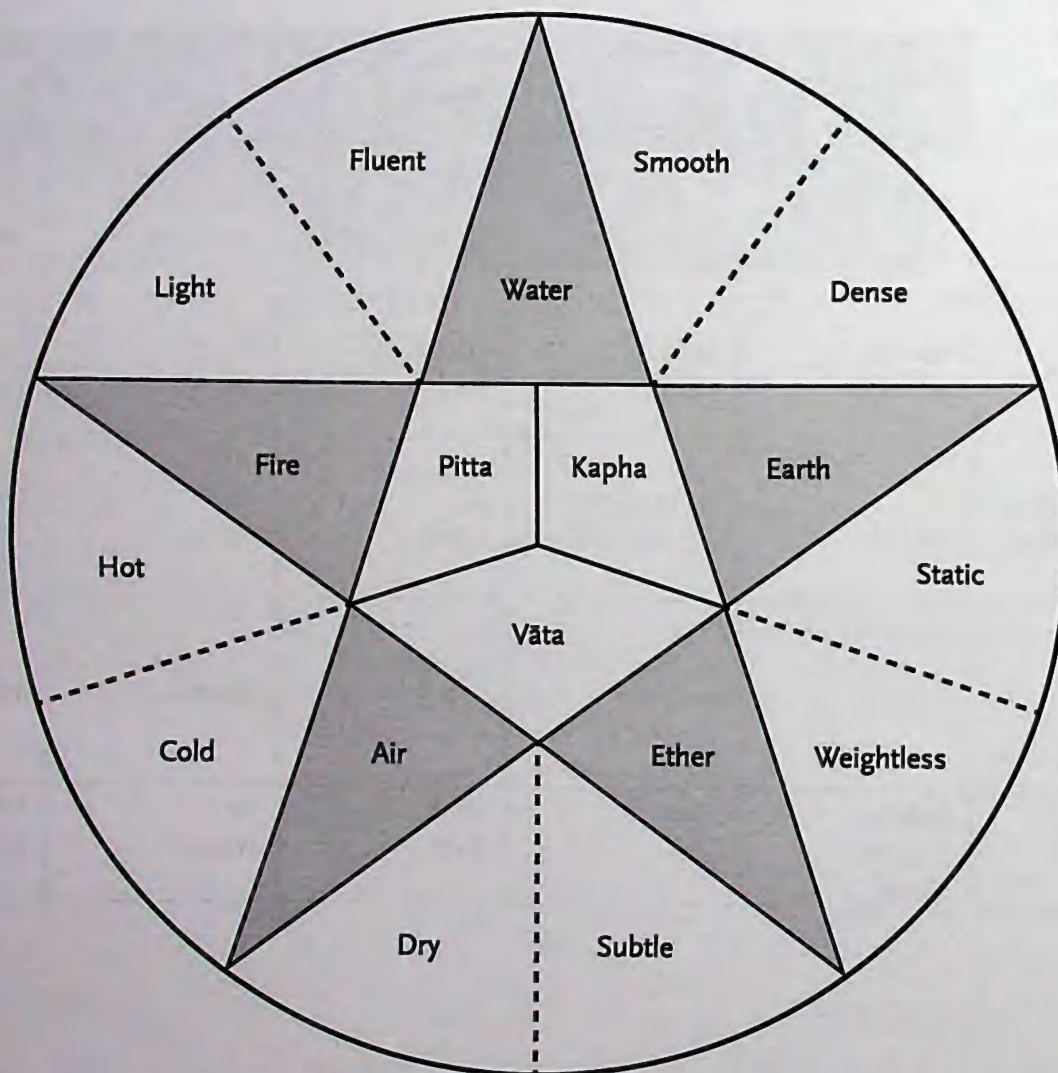
A matrix showing how our senses, subtle sense organs, vital energy and elements evolve to become five-fold due to the impact and interplay of five-fold diversification of the three binding constituents (*guṇa*) – *sattwa*, *rajas* and *tamas* in nature or Prakriti. As *sattwa* and *tamas* are antipodal, there cannot be any combination. Herein, *sāttwika* is implying the characteristics of *sattwa*, and so forth.

	Sāttwika	Sāttwika + Rājasika	Rājasika	Rājasika + Tāmasika	Tāmasika
Jñānendriya (subtle organs of sense perception)	Auditory (ears)	Thermal (skin)	Visual (eyes)	Gustatory (tongue)	Olfactory (nose)
Karmendriya (subtle organs of motor action)	Vocal (speech)	Manual (arms)	Locomotive (legs)	Excretory (anus)	Procreative (genitals)
Tanmātra (subtle energies that are causes of elements)	Of Sound	Of Sensation (heat or cold)	Of Light	Of Taste	Of Smell
Prāna (lifeforce or vital energy that sustains the body)	Prāna	Udāna	Vyāna	Apāna	Samāna
Bhūta (elements)	Ākāsha (space or ether)	Vāyu (air)	Tejas (fire)	Āpa (water)	Kshiti (earth or soil)



Elements & Dosha

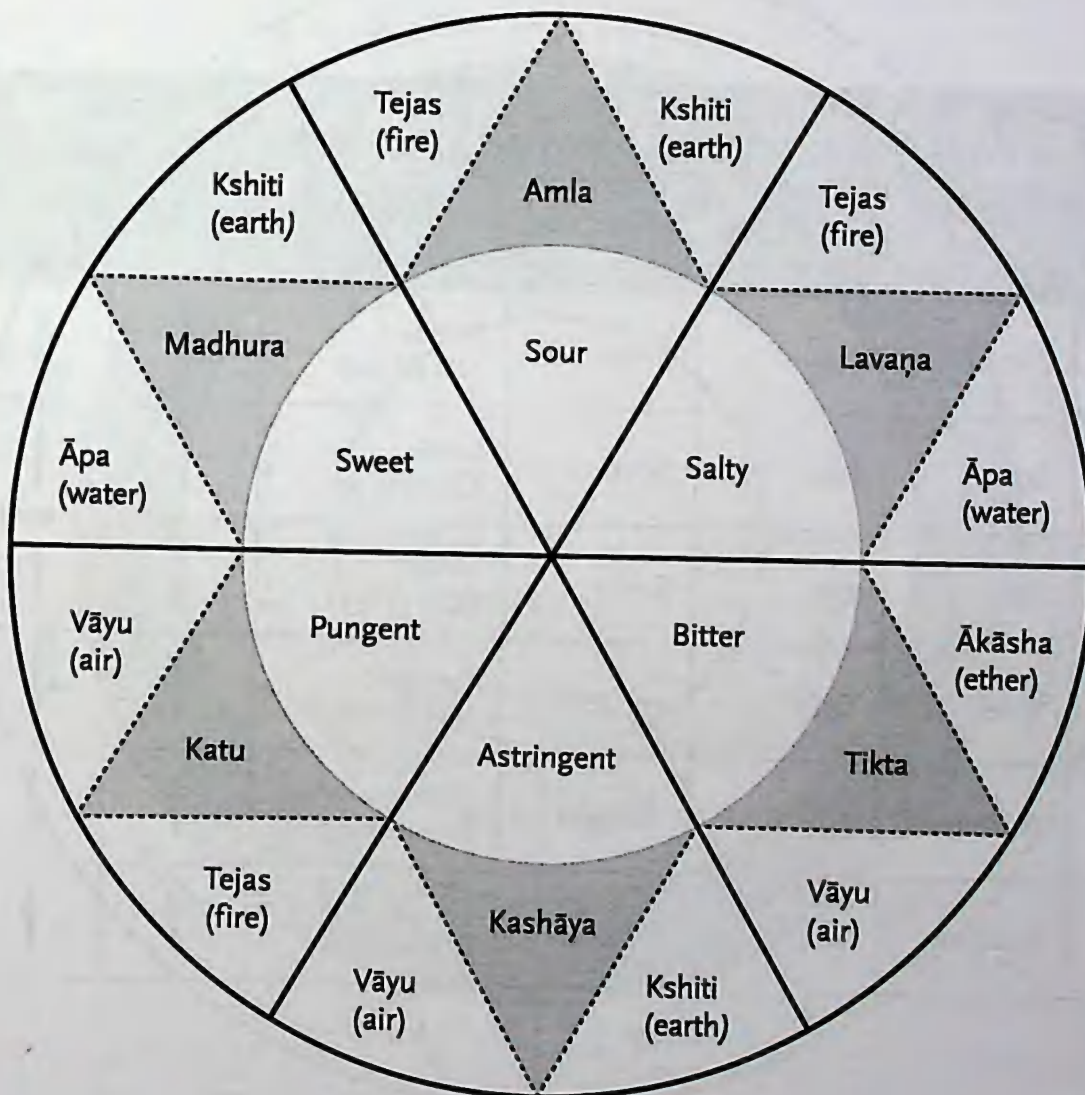
In this diagram the five-pointed star captures the interaction of the five elements with the three *dosha*. Both Pitta and Kapha are shown inside the central pentagon as sharing the element water. Properties of each *dosha* arising out of their interaction with the elements are shown outside the star. This diagram is fundamental to the understanding of basic principles of Ayurveda and the mind/body *dosha* constitution.





Elements & Taste

In this diagram the six-pointed star captures the interaction of the six tastes with the five elements. In Ayurveda, *rasa* is expressed as the 'juice of life' and can imply a wide range of subjects, including alchemy. Herein *rasa* implies the six tastes as they are felt on the tongue. The combination of two elements as they relate to a single taste is presented. The Sanskrit names of each taste are shown in the shaded points of the star.





Effect of Six Tastes on Dosha

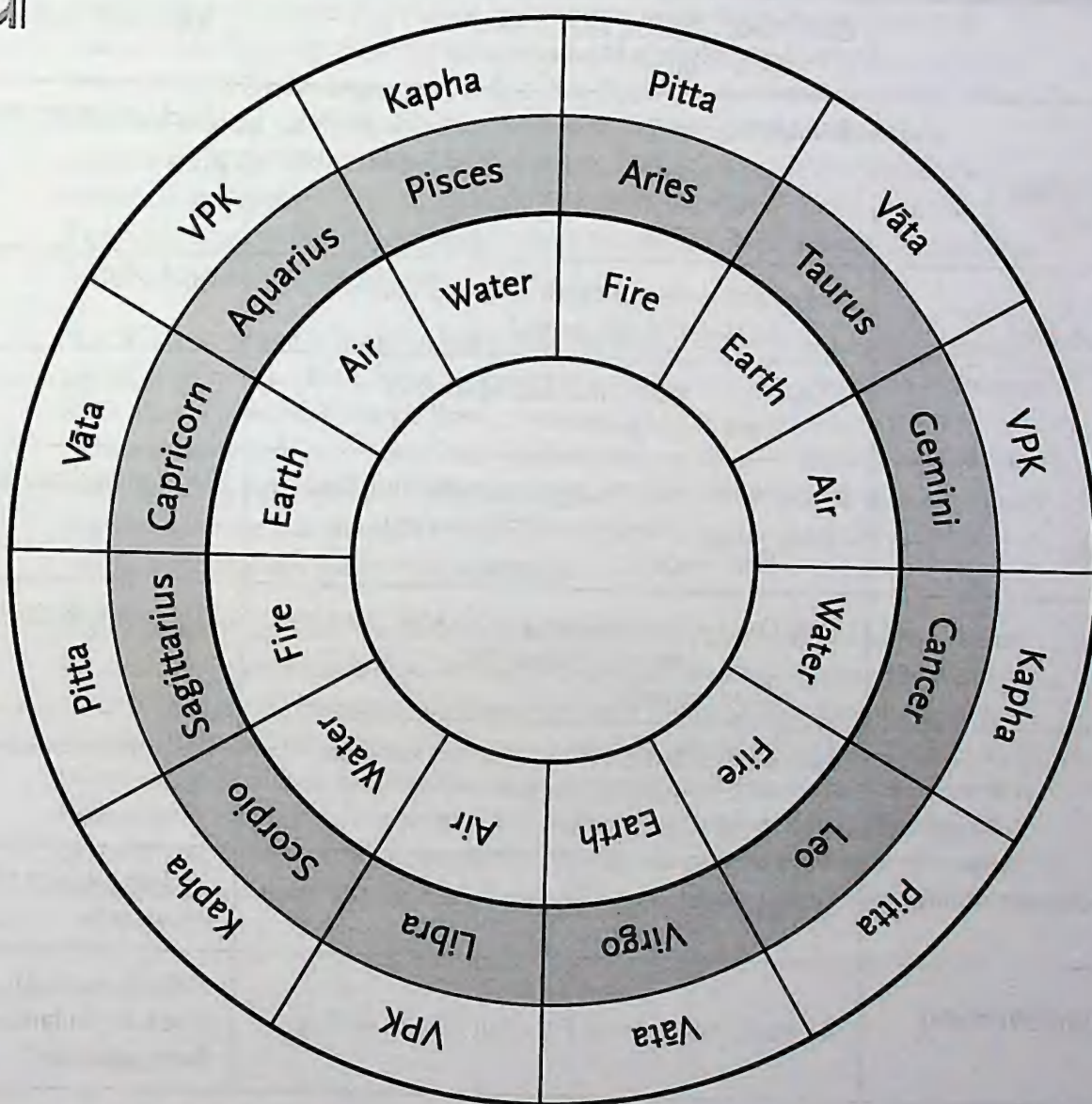
The chart shows the impact on the three *dosha*, from taste on the tongue, potency during digestion, and the post-digestive effect. Provoking is indicated by an up arrow, whereas pacifying is indicated by a down arrow. The second column shows the elements that make up the *rasa* or the "juice of life", which translate here as the taste of food. The combination of two elements as they relate to a single taste is shown in the first column.

Bhuta Element	Rasa Taste	Virya Potency during digestion	Vipāka Post-digestive effect	Exception	Vāta	Pitta	Kapha
Earth + Water	Sweet	Cold	Sweet	Honey Hot (Virya)	↓	↓	↑
Earth + Fire	Sour	Hot	Sour	Lime Cold (Virya)	↓	↑	↑
Water + Fire	Salty	Hot	Sweet	Tamari Cold (Virya)	↓	↑	↑
Air + Ether	Bitter	Cold	Pungent	Turmeric Hot (Virya)	↑	↓	↓
Air + Earth	Astringent	Cold	Pungent	Pomegranate Sweet (Vipāka)	↑	↓	↓
Fire + Air	Pungent	Hot	Pungent	Onion Cold (Virya)	↑	↑	↓



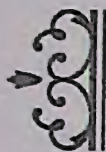
Assignment of Dosha to Constellation

The diagram shows the assignment of *dosha* to all 12 constellations of the zodiac alongside their relationship with four elements. The four palpable elements (air, fire, water and earth) are assigned to three constellations each, covering the zodiac. Three constellations with air as the primary elemental influence bear a relationship with all three *dosha* depicted as VPK.





Assignment of Dosha to Graha and their Operators



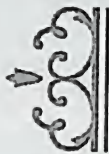
The chart outlines the assignment of Ayurvedic *dosha* to *graha* (impacting planet or luminary), the body parts ruled by the *graha* and related taste, along with the corresponding operating factors influenced by the *graha*. Herein *graha* implies seizing energy that influences health due to the spatial movements of planets and luminaries in the cycle of time.



Graha and related Dosha	Guṇa and related Rasa (Attributes & Taste)	Kāraka (Operators)
Sun Pitta	Body Parts – bones, eyes, heart Taste – bitter	Health and vitality
Moon Kapha (waxing)/ Vāta (waning)	Body Parts – lymph, blood, spleen, digestive system, reproductive fluids, aqueous fluids Taste – salty	Mind and emotions
Mercury VPK (tri-dosha)	Body Parts – skin, plasma, nervous system Taste – VPK (tri-doshic)	Intellect
Mars Pitta	Body Parts – blood, muscle, ligaments Taste – pungent	Ego, strength and courage
Venus Vāta/Kapha	Body Parts – kidneys, eyes, reproductive fluids, immune system, pancreas Taste – sour	Passion and beauty
Jupiter Kapha	Body Parts – liver, spleen, gallbladder, pancreas, adipose tissue (fat) Taste – sweet	Wisdom and happiness
Saturn Vāta	Body Parts – teeth, joints, marrow, nervous system, sinews Taste – astringent	Longevity, disease and death
Rahu (northern node) Vāta	As Saturn (primarily Vāta)	Addictions, use of intoxicants
Ketu (southern node) Vāta	As Mars (resembling Pitta but rooted in Vāta)	Difficult-to-diagnose diseases, inflammation from parasites



Questionnaire on Ayurvedic Dosha Constitution



Sanskrit literature of Vedic philosophy terms Prakriti as unmanifest matter. Prakriti is said to be the opposite of Purusha, the latter being the conscious entity that is ever manifest. Purusha is the seer or knower, whereas Prakriti is seen or known. When Purusha sees and aligns with Prakriti, it causes Prakriti to become manifest and evolve. This evolving Prakriti is termed as Vikriti. Therefore, Vikriti is a term used to denote evolving matter or evolution in general.




Ayurveda refers to the basic constitution one is born with also as Prakriti, indicating a state of equilibrium. Prakriti is determined at the time of conception and remains constant throughout one's life, signifying the original balance in the zygote. The Prakriti for each person is a unique combination of the three *dosha* (functional molecular/cellular intelligence that are prone to evolutionary adaptation), namely, Vāta, Pitta and Kapha. Some people find that they have one dominant *dosha*, some have two that are nearly equal and a rare few have equal portions of all three *dosha*. Herein the Vikriti is the measure of imbalance due to the evolving *dosha* combination, essentially changing Vāta, Pitta or Kapha, further away from the Prakriti or original body constitution. Vikriti in its acute or chronically deviated state brings about the disease process.


It is wise for anyone to lead a mindful lifestyle so that Vikriti does not bring about the onset of disease. Even more important is to assess and understand one's Prakriti so that proper wellness and wellbeing routines can be implemented in order to reduce the grip of Vikriti. Therefore, what is pertinent is the analysis of one's basic constitution so that a greater understanding of Prakriti is developed. A questionnaire is presented here that attempts to build, through its categories of observables, a simple understanding of one's innate traits.

For each category, please check the box in front of the statement that best describes you and your basic constitution. If you have changed dramatically over the course of your life, choose the answer that describes how you have been for the majority of your life, including during childhood and during times of good health. If for a particular question you find that two answers equally suit you, place a check mark in front of both statements, but only do this in the event that two descriptions equally describe you. Do not mark *three boxes* for any one category. At the end of the survey, follow the instructions to determine the *doshic* percentages of your constitution.

**Observable****A****B****C**

1. Body Frame	<input type="checkbox"/> Slight, Thin	<input type="checkbox"/> Well-proportioned	<input type="checkbox"/> Heavy, Large
2. Body Weight	<input type="checkbox"/> Low	<input type="checkbox"/> Moderate	<input type="checkbox"/> Overweight
3. Skin Feel	<input type="checkbox"/> Dry, Cold, Cold extremities	<input type="checkbox"/> Flushed, Oily on nose, chin and forehead	<input type="checkbox"/> Oily, Cool, Thick
4. Skin Texture	<input type="checkbox"/> Thin, Dry, Rough, Cracked, Flaky	<input type="checkbox"/> Oily, Freckles or moles, Redness, Rashes, Bruises easily	<input type="checkbox"/> Soft, Firm, Smooth
5. Complexion	<input type="checkbox"/> Brownish tone, Uneven, Tans easily	<input type="checkbox"/> Red or yellow tone, Burns easily, Flushed, Prone to acne	<input type="checkbox"/> White tone, Fair, Pale, Marble-like, Glowing
6. Hair	<input type="checkbox"/> Dry, Curly, Knotted, Brittle, Scarce, Dark, Brown, Black	<input type="checkbox"/> Straight, Thin, Oily, Blond/red, Greying/balding early	<input type="checkbox"/> Thick, Curly, Oily, Wavy, Luxuriant
7. Nose	<input type="checkbox"/> Long, Thin, Uneven shape, Deviated septum	<input type="checkbox"/> Symmetrical, Pointed, Red tip	<input type="checkbox"/> Short, Rounded, Button
8. Eyes	<input type="checkbox"/> Small, Sunken, Dry, Active, Black, Brown, Nervous	<input type="checkbox"/> Sharp, Bright, Intense, Grey, Green, Yellowish cornea, Sensitive to light	<input type="checkbox"/> Large, Luminous, Beautiful, Bluish, Calm, White cornea
9. Eyelashes	<input type="checkbox"/> Scanty	<input type="checkbox"/> Moderate	<input type="checkbox"/> Thick
10. Eye Blinking	<input type="checkbox"/> Excessive	<input type="checkbox"/> Average	<input type="checkbox"/> Slow, Infrequent
11. Nails	<input type="checkbox"/> Dry, Rough, Brittle, Break easily	<input type="checkbox"/> Sharp, Flexible, Pink, Lustrous	<input type="checkbox"/> Thick, Oily, Smooth, Polished
12. Teeth	<input type="checkbox"/> Irregular, Stick out, Big, Roomy, Thinner gums, Can have brownish stain	<input type="checkbox"/> Medium, Soft, Tender or bleeding gums, Can have yellowish stain	<input type="checkbox"/> Healthy, White, Strong gums
13. Chin	<input type="checkbox"/> Thin, Angular	<input type="checkbox"/> Tapering	<input type="checkbox"/> Rounded, Double
14. Cheeks	<input type="checkbox"/> Sunken, Wrinkled	<input type="checkbox"/> Smooth, Flat	<input type="checkbox"/> Rounded, Plump
15. Lips	<input type="checkbox"/> Thin, Dry, Cracked, Black/brown tinge	<input type="checkbox"/> Medium full, Red, Inflamed, Yellowish	<input type="checkbox"/> Full, Smooth, Oily, Pale, Whitish
16. Neck	<input type="checkbox"/> Thin, Long	<input type="checkbox"/> Well-proportioned	<input type="checkbox"/> Broad, Strong
17. Chest	<input type="checkbox"/> Flat, Sunken	<input type="checkbox"/> Moderate, Medium	<input type="checkbox"/> Expanded, Round
18. Belly	<input type="checkbox"/> Thin, Flat, Sunken	<input type="checkbox"/> Flat, Good tone	<input type="checkbox"/> Big, Pot-bellied
19. Belly-button	<input type="checkbox"/> Small, Irregular, Herniated	<input type="checkbox"/> Oval, Superficial	<input type="checkbox"/> Big, Deep, Round, Stretched
20. Hips	<input type="checkbox"/> Slender, Thin	<input type="checkbox"/> Moderate, Medium	<input type="checkbox"/> Heavy, Big
21. Joints	<input type="checkbox"/> Cold, Cracking	<input type="checkbox"/> Moderate, Prone to inflammation	<input type="checkbox"/> Large, Lubricated

 Observable	A	B	C
22. Walking	<input type="checkbox"/> Rapid and light gait	<input type="checkbox"/> Confident and fast gait	<input type="checkbox"/> Slow and steady gait, Dignified
23. Physical Activity	<input type="checkbox"/> Swift, Fast, Hyperactive	<input type="checkbox"/> Moderate, Efficient, Regular, Orderly	<input type="checkbox"/> Slow, Methodical, Enduring, Good stamina
24. Mental Activity	<input type="checkbox"/> Creative, Fast, Can get disorganized or distracted	<input type="checkbox"/> Focused, Driven, Goal-oriented, Can get impatient	<input type="checkbox"/> Slow, Steady, Methodical, Can procrastinate
25. Energy Level	<input type="checkbox"/> Fluctuates, Comes in bursts	<input type="checkbox"/> Good, but sometimes can push to exhaustion	<input type="checkbox"/> Steady, Good endurance and stamina
26. Heartbeat Pulse	<input type="checkbox"/> 80-95	<input type="checkbox"/> 65-80	<input type="checkbox"/> 50-65
27. Blood Circulation	<input type="checkbox"/> Weak, Tends toward cold hands and feet	<input type="checkbox"/> Strong, Warm to the touch	<input type="checkbox"/> Moderate, Cool to the touch
28. Immunity	<input type="checkbox"/> Delicate, Easily overwhelmed	<input type="checkbox"/> Good, Can be overwhelmed when overworked	<input type="checkbox"/> Strong, Rarely gets colds and flus
29. Appetite	<input type="checkbox"/> Varying, Irregular, Scanty, Eats quickly	<input type="checkbox"/> Strong, Light-headed or irritable if meals are skipped	<input type="checkbox"/> Slow but steady, Easy to skip meals
30. Digestion	<input type="checkbox"/> Irregular, Forms gas	<input type="checkbox"/> Quick, Causes burning	<input type="checkbox"/> Prolonged, Forms mucous
31. Weight Gain	<input type="checkbox"/> Hard to gain weight	<input type="checkbox"/> Stable, Tends to not lose or gain weight	<input type="checkbox"/> Easy to gain weight
32. Preferred Tastes	<input type="checkbox"/> Sweet, Sour, Salty	<input type="checkbox"/> Sweet, Bitter, Astringent	<input type="checkbox"/> Bitter, Astringent, Pungent
33. Thirst	<input type="checkbox"/> Changeable	<input type="checkbox"/> Strong, Surplus	<input type="checkbox"/> Sparse
34. Bowel Movement	<input type="checkbox"/> Dark brown, Hard and dry stool (like rabbit pellets), 1 time per day or less	<input type="checkbox"/> Medium brown, yellowish or greenish, Tends toward loose stool, 2-3 times per day	<input type="checkbox"/> Medium brown, Well-formed banana shape, Tends toward mucous, Like clockwork, 1-2 times per day
35. Urine	<input type="checkbox"/> Frequent, Sparse	<input type="checkbox"/> Yellowish, Copious	<input type="checkbox"/> Infrequent, Average quantity
36. Sweat	<input type="checkbox"/> Minimal	<input type="checkbox"/> Profuse, Often odorous	<input type="checkbox"/> Slow to begin, Heavy
37. Speech	<input type="checkbox"/> Expressive, Colourful	<input type="checkbox"/> Sharp, Accurate, Exacting, Sometimes sharp-tongued, Tends toward criticism	<input type="checkbox"/> Slow, Deliberate, Melodious voice, Can be monotonous
38. Faith	<input type="checkbox"/> Variable	<input type="checkbox"/> Extremist, Fanatical	<input type="checkbox"/> Consistent, Steady, Unshakable
39. Dreams	<input type="checkbox"/> Quick, Active, Restless, Many, Fearful, Flying	<input type="checkbox"/> Fiery, Aggressive, Competitive, Violent	<input type="checkbox"/> Pleasant, Romantic, Watery, Lakes, Snow
40. Sleep	<input type="checkbox"/> Light, Interrupted, Occasional sleeplessness	<input type="checkbox"/> Moderate, Sound, Sensitive to light	<input type="checkbox"/> Heavy, Deep, Prolonged

 Observable	A	B	C
41. Finances	<input type="checkbox"/> Poor, Spends on trifles	<input type="checkbox"/> Spends money on luxuries	<input type="checkbox"/> Rich, Good money preserver
42. Schedule	<input type="checkbox"/> Irregular, Frequently changing	<input type="checkbox"/> Disciplined	<input type="checkbox"/> Relaxed, Hard to get going
43. Intolerance	<input type="checkbox"/> Loud sounds, Rough emotions	<input type="checkbox"/> Bright light, Stuffy or crowded rooms	<input type="checkbox"/> Too much change
44. Low Weather Tolerance	<input type="checkbox"/> Cold/dry/windy climates	<input type="checkbox"/> Hot/humid climates	<input type="checkbox"/> Cold/damp climates
45. Pain Tolerance	<input type="checkbox"/> Low tolerance, Avoids pain	<input type="checkbox"/> Moderate tolerance, Normal	<input type="checkbox"/> High tolerance, Stoical
46. Intellectual Tendency	<input type="checkbox"/> Fast mind, Flexible, Understands quickly, Forgets quickly	<input type="checkbox"/> Penetrating, Insightful, Can become rigid believing there is one "right" answer	<input type="checkbox"/> Learns slowly, Rarely forgets, Stable, Logical, Can ponder deeply
47. Mental Tendency	<input type="checkbox"/> Restless, Expansive, Imaginative, Distracted	<input type="checkbox"/> Quick, Focused, Clear, Organized, Critical	<input type="checkbox"/> Slow, Logical, Determined, Dull
48. Possessiveness	<input type="checkbox"/> Detached from material things, but can be needy, Afraid of being alone	<input type="checkbox"/> Attached to beautiful or expensive material things, Attached to power and prestige	<input type="checkbox"/> Attached to material and emotional things, Very sentimental
49. Problem Response	<input type="checkbox"/> Worried, Can give wrong solution	<input type="checkbox"/> Agitated, Gives firm, right solution	<input type="checkbox"/> Calm and slow, Gives right solution
50. Negative Emotions	<input type="checkbox"/> Anxious, Worried, Insecure, Fluctuating moods	<input type="checkbox"/> Irritated, Angry, Impatient, Arrogant, Stubborn	<input type="checkbox"/> Possessive, Depressed, Lazy, Hard to make changes
51. Positive Emotions	<input type="checkbox"/> Enthusiastic, Flexible, Sensitive, Forgiving, Light-hearted	<input type="checkbox"/> Committed, Responsible, Confident	<input type="checkbox"/> Stable, Compassionate, Loving, Devotional
52. Concentration	<input type="checkbox"/> Varies, Erratic, Sometimes good, sometimes weak	<input type="checkbox"/> Strong, Disciplined	<input type="checkbox"/> Tends toward dull, Needs discipline
53. Memory and Recollection	<input type="checkbox"/> Learns quickly, Forgets quickly, Recent good, Remote weak	<input type="checkbox"/> Distinct, Average, Memorizes well	<input type="checkbox"/> Slow, Sustained, Remembers forever
54. Personality	<input type="checkbox"/> Lively, Fun, Creative, Shy, Original, Love to try new things, Quirky	<input type="checkbox"/> Serious, Courageous, Generous, Goal-oriented, Efficient, Enjoys making lists, Enjoys puzzles and games	<input type="checkbox"/> Relaxed, Even-keeled, Sensual, Enjoys lounging, Jolly
TOTALS	A:	B:	C:
GRAND TOTAL:	A + B + C =		

☞ Determine the Doshic Percentages of your Prakriti

STEP 1: Add up the totals for each column in the "Totals" row. Then add up the 3 values from your "Totals" row, or the total quantity of all your checkboxes in all three columns (A, B, C). This is your **Grand Total**.

STEP 2: Determine the percentages of A, B and C by multiplying each total value by 100 and dividing that by your **Grand Total**. So if your Grand Total is 40 and your total for column A is 20, the equation to determine your percentage of "A" is: 20 multiplied by 100 divided by 40, which equals 50 percent ($20 \times 100 / 40 = 50\%$).

STEP 3: Transfer your percentages to the table below for your unique Prakriti:

A	_____ %	Vāta
B	_____ %	Pitta
C	_____ %	Kapha

STEP 4: Your dominant constitution is determined by the *dosha* with the highest percentage. You may have two *dosha* with equal percentages or rarely perhaps all three *dosha* with nearly equal percentages.

Life Energy

Biorhythms



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Harnessing the Inner Fire & Fire in the Eyes

The day after the new moon in Pisces heralds the start of the new soli-lunar calendar as per the ancient Sanskrit-based tradition of the Vedic New Year. The first sunrise coinciding with the first day of the ascending moon posited in Pisces marks the beginning of the new soli-lunar year known as *yugādi*, which means the beginning of a *yuga* or an era (*chaitra-shukla-pratipāda*).

The calculation of these calendar details is exhaustive and takes into account the continuous cycles of movements of the heavenly bodies, including planets and distant star clusters, with respect to both the Sun and the Moon. More importantly, the calendar itself allows for mapping auspicious transitions and junctures especially meaningful for seekers and meditators alike. In particular, the Vedic New Year is a time for welcoming the coming cycles with spiritual resolutions or vows.

Under normal conditions, a seeker relies on the external sources of energy that satiate through breath, drinks and edibles. Thus the innate urge for replenishment (*ājīrṣhābodha*) is quenched by the three resources for cultivating *prāna* or the vital life energy. The daily and seasonal calendar cycles that are in synchrony with our breath and heartbeat define the *prāna* calendar in relation to the local geographical coordinates. By adopting a synchronized spiritual discipline that attunes to the inbuilt relationship of *prāna* and our biorhythms with the dynamic soli-lunar calendar, we become more closely connected with the energy coordinates within our bodies and around us.

The physical body evolving from a combination of the five elements, namely space, air, fire, water and earthy solids, is in general much dependent on the quality of interaction with the environment and food. Therefore, the depth of seeking and ability to meditate or concentrate are inherently connected with the seeker's lifestyle through wellness and wellbeing routines. This is where a seeker first embraces the basic spiritual principles and builds up spiritual sensitivity and clarity of perception through mindfulness.



For example, Yoga philosophy teaches one to practise the ten commandments of yoga consisting of five restraints (*yama*) and five observances (*niyama*) to remove emotional disturbances. Postural disciplines (*āsana*) in linked sequences are invoked to remove physical disturbances. Breathing techniques and breath control exercises (*prāṇāyāma*) are mastered to balance the flow of energy or *prāṇa* in the body. Thereafter, the ten subtle sense organs (five organs of sense perception and five organs of motor action) are subjugated (*pratyāhara*) so that the hankering for external sources of impressions can be controlled or paused at will. This fifth limb out of the eight limbs or levels of yoga is essential before a seeker can spontaneously step into the sequence of attention leading to meditation followed by absorption, together called the threefold yoga of concentration. Absorption or *samādhi* is then the gateway to higher yoga or advanced meditation.

This fifth level, named as *pratyāhāra*, implies controlled eating or natural subjugation of food for the mind. Herein eating does not simply refer to edible food but also to the intake of impressions (food for thought). The subtle sense organs gather impressions through an extroverted urge which when controlled allows the seeker to break the cycle of pleasure, pain and stupefaction. Consistent meditative practices are best supported by dispassion (which does not necessarily compromise spiritual enthusiasm) and introversion of the sense organs. These disciplined practices require the inner fire to be invoked, often revealed as the glittering spark in the eyes.

While water flows downward and creeps into the soil or earth that is ever ready to behold it, fire rises upward. Thus fire is the important element which helps overcome the gravitating tendencies; it helps garner the subtle elemental qualities of air and then space. This fire is seated in the centre of gravity within our body and feels immanent as the energy behind the belly button and digestion. While solids and liquids accumulate and make us feel heavy around the lower belly or waistline, fire helps to burn up and unburden the seeker of the ill results of food aberration. Diseases begin in the intestines and show in the face! Most importantly, the rising quality of fire helps with the controlled upward movement of *prāṇa*, so critical in achieving breath control and then tranquility.

Lack of affirmations to uphold physical and mental disciplines or meditative practices are connected with a diminished fire. Resistance to follow through on resolutions is related to the stupour of excessive consumption that douses this fire. The intellectual force applied in disciplined practices is verily the inner fire or the fire of awakening, which is rooted in the cultivation of the practices that stoke the fire element. Thus, ablutions facing the sun just after dawn and just before dusk or when the sun is at its zenith above our heads (*sandhyā-vandanam*), as well as elaborate fire ceremonies as in *homa* (or through daily fire rituals of *agnihotra*) have remained the bedrock of spiritual practices since early Vedic times, though practised to a lesser extent today.

While Vedic fire ceremonies still evoke the magic of peace and bliss in the sincere seeker, it is important to note that the fire element is also cultivated by



absorption through the eyes. While breathing techniques of *prāṇāyāma* prepare the field by bridging the fire element with the air and then space, the open eye meditation (*shāmbhavi*) on a lamp and then on the moon and sun leads to optimum purification of the subtle visual sense organ (note that the visual sense organ guides the physical eyes).

Overload from visual impressions is common to the eyes, which are served by four cranial nerves, and rapidly shifting (*rājasika*) visual stimulation easily brings about spread-thin tendencies. Instead of beholding the beauty and feeling enraptured, the eyes usher in riveting impressions and their overuse often undermines the faculty of memory (*smṛuti*). Energy is lost through the eyes faster than the eyes can take it in, resulting in an indirect abuse of the fire element. Herein it is important to emphasize the inner link between the navel (centre of gravity) and the eyesight! So much so, the health of the eyes is very much dependent upon an attuned digestive fire and optimum use of the fire element. For a spiritual seeker, fire in the belly is transformed into fire in the eyes. The source, type and intake of food itself become wholesome.

Through persistent practice under adept guidance, when the open eyes become steady while looking at a lamp (*trātaka*), one is ready to begin absorbing the subtle golden light of the rising and setting sun through the open eye meditation. This is of course attempted only under adept guidance, provided the breathing techniques and cleansing yogic practices (*shatkarmāṇi*) have opened the energy pathways (*nādi*) including the nerves, blood vessels and capillaries. The eyes become the gateway for *agni* (solar fire) and *soma* (lunar nectar) in balance with the *prāṇa* and *nādi*. These four Sanskrit concepts form the pillars of wellness and wellbeing in a seeker as per the teachings of Yoga and Ayurveda.

The open eye meditation is not to be equated with unprotected sun gazing or sun bathing which might cause retinal damage or sunburn. This is a superior yogic technique of absorbing light with the eyes open but unstressed and with internal attention and breathing such that the *prāna* comes in through the *sushumnā* or the central *nādi* of awakening! These techniques can only be learnt under an adept through direct teachings and careful practice. The meditation is perfected first on the rising and setting sun for a few minutes and on the full moon. The *nādi* and the brain warmed from fiery practices get cooled when open eye meditation is performed on the three evenings in a row centred on the full moon evening.

Cultivating the fire element is thus at the root of a seeker's spiritual practices and fire is verily the power behind persistent efforts to meditate. The very stamina a seeker strives to build upon is the staying power or intellectual force of the mental exercises in meditation. The inner fire rises to the subtle level wherein a supervised seeker can invite light through the eyes. A good marker for a beginner on this path is the lightness of being and an unburdened feeling of not dragging around one's own body weight. The fire behind soli-lunar affirmations is then the fire illuminating the pathway to the inner light. In this process, our energy increases and our eyes radiate the inner light through optimal use of the external sources of *prāna*.

The first nine days of the New Year culminating in the *Shri-Rāma-navami* celebration on the ninth day are a special time for intense spiritual practices and meditative disciplines, which are then reaffirmed on the tenth day for proper fruition of resolutions thereafter. A seeker begins this period by bowing in gratitude to the external sources of energy and the mental prowess of great creators, and traces the sun and moon to be ultimately latent in a mighty merciful mind. Let the Vedic New Year awaken the spirit of firm resolutions and spiritual vows through the harmony of the inner fire with the outer fire. Let the fire of seeking awaken and all urges mature into spiritual poise and meditative composure.

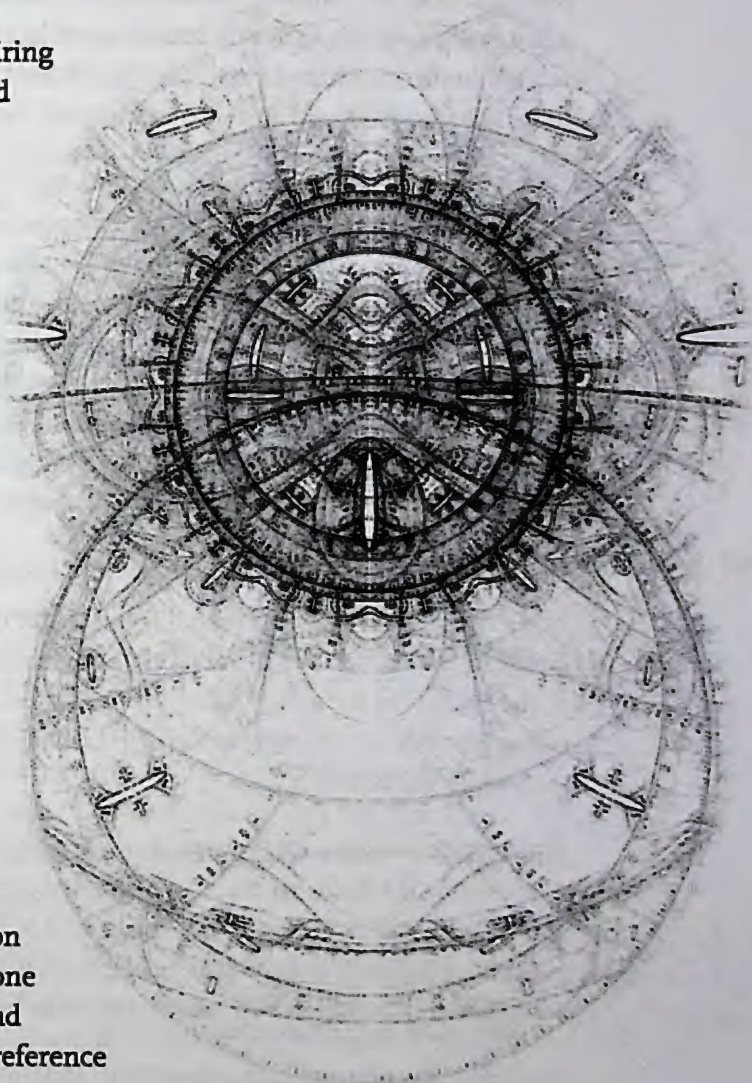


Biorhythms and the Dynamic Calendar

⇒ Affirmations based on the *prāna* calendar

The history of the calendar is long, requiring arduous study of past simplifications and periodic adaptations. There are many pitfalls, and to that effect, calendar making over a couple of thousand years ago had been mired with errors and corrections. There is, however, the ancient system from Vedic antiquity which invokes the Sanskrit tradition of soli-lunar calendar calculation to determine the passing of the year and the timing of auspicious transitions. This calculation yields a dynamic calendar with several checkpoints for adjustments already built in (through intricacies of the *Ayanāmsa* calculations). Modern astronomy confirms the validity and accuracy of this dynamic calendar. Nevertheless, with respect to our modern solar calendar, this soli-lunar dynamic time frame keeps on shifting. Thus the new year start date varies based on the position of a particular new moon. For example, one year it may fall in the month of March and another year in the month of April with reference to the solar calendar we are familiar with.

The Vedic New Year begins with the first soli-lunar day of the ascending cycle of the moon immediately after the new moon when the Sun is in Pisces. This day is known as the *chaitra-shukla-pratipāda* or the first day of the lunar ascending cycle when the Moon is posited in the lunar asterism (*naxatra*) of Revati. This significant cosmic transition is captured by the Sanskrit word *yugādi* or the start of an era. It represents an opportunity to renew our affirmations for the coming times. For



meditators this is an ideal transition period to revive their daily spiritual practices (*sādhana*).

This transition is based on the rhythms of nature and cycles of time as they relate to the relative movement of heavenly bodies, including lunar asterisms and the constellations. The synergy effects make it pertinent that we synchronize our affirmations and routines based on the cosmic time calendar given to us by the extant Sanskrit literature and its calculations. The spiritual resolutions and the attendant disciplines can be felt closely connected with the energy coordinates within our bodies and around us. The soli-lunar calendar maps the diurnal rhythms with respect to luminaries and planets in deep space while the movement of these heavenly bodies retains a relationship with our breath. During one regular breath by a human being, the heavenly bodies move in space by one minute of arc, obviously related to the rotation of Earth (see the section “Time cycles of sixty” for more details).

In other words, the Vedic soli-lunar *prāna* (lifeforce energy) calendar is based on a continuous mapping of the relative positions of heavenly bodies within our solar system and with reference to the lunar mansions farther out into space from Earth. Here on Earth, according to the geographic coordinates where we are located, this daily *prāna* calendar maps the biorhythms influencing us through the cosmic motion of luminaries and planets. Equipped with an understanding of these transitions of key space-time coordinates, we can make affirmations at these auspicious times that become more meaningful.

⇒ *Equinox and the equal breath*

The Persian New Year is celebrated on the day of the vernal equinox. During an equinox, the Earth's axis of rotation is perpendicular to the line connecting the centres of the Earth and the sun. The duration of night and day across the world is nearly equal. It is exactly equal at the equator but the day is slightly longer in places further away from the equator.

Right nostril breathing is governed by solar rhythms whereas left nostril breathing is governed by the lunar rhythms. An equinox signifies balance. And soli-lunar rhythms are in equilibrium. Hence the breath is said to be in a calmer phase. This crossover point thus happens twice a year, once in autumn and once in spring. Both of these soli-lunar junctures have special significance in the soli-lunar Vedic calendar.

Similarly, according to some other traditions, a solar new year starts when the Sun moves into the constellation of Aries, which happened during mid-April in 2014. The current sidereal position of the Sun is roughly at nine degrees Pisces at sunrise on the vernal equinox; interestingly the same position represents the entry of the Sun into Aries (zero degrees) as per the tropical calculations! In any case, all these transitions and new year crossovers are significantly related to either solar or lunar junctures.

≡ Time cycles of sixty

The Sanskrit conception of time is an elaborate framework which cyclically relates the bygone with the upcoming, and past efforts with future momentum, through the momentous 'present' and as the inevitable *kāla*, or the eater of all. The concepts are further amplified by the nuances of the Vedic soli-lunar calendar wherein complicated rhythms of the heavenly bodies are mapped, with respect to both the Sun and the Moon, onto our biorhythms and daily routines. The traditional following of the 'auspiciousness' of periods and days is captured in a unit of 'proper time' known as a *muhurta* or two units of 24 minutes totalling 48 minutes. Sometimes an entire day is considered favourable depending upon the chores and ceremonies that define the range of activities. While personal meditation practices or mental affirmations are rarely constricted by the dynamic components of the calendar, professional and ceremonial activities related to work and service are brought under a purview of the 'right time' for starting in order to gain momentum. There are also the special days based on immensely significant events deemed as divine and awe-inspiring thereby evoking reverence and enumeration by devotees who adore such happenings.

The Vedic New Year calculation and ethos is based on a cycle of 60 as per the sexagesimal system. Each soli-lunar year is known as *samvatsara* with 60 unique names. Our resting heartbeat of one beat per second is considered to be the rhythm at the root of this system. Even though the soli-lunar years are meant to be a continuous series of adjustable time partitions based on the shifts of the heavenly bodies with respect to earth, their Sanskrit names are repeated every 60 years.

The number 60 has 12 factors (the total number of constellations in the zodiac that the Sun traverses in a year!) and is the smallest number divisible by every number from 1 to 6. Whereas an average of 6 breaths span 24 seconds, 360 breaths usually take 24 minutes or 1/60th of a day; and 21,600 human breaths take 24 hours or a full day. 360° of sky-arc pass over the horizon in one day. $1/60$ of $360^\circ = 6^\circ = 360$ minutes of arc. Thus 360 breaths cover 360 minutes of arc in space. Therefore, during one breath, the heavenly bodies move in space by one minute of arc. Thus our breathing patterns and heartbeat rhythms are mapped and connected to the macrocosm through the process of evolution.

The ancient Sanskrit system of Jyotisha (the Vedic science of light and heavenly bodies) uses exhaustive mathematical calculations utilizing both the Sun and Moon as reference points. Therefore, solar constellations mapping the movement of the Sun are used alongside the 27 (+1) lunar asterisms (also called mansions) that the Moon traverses. Sanskrit literature calls the heavenly bodies as *graha* or that which seizes us (planet or luminary). And also takes into account the effects of the moons of Saturn and Jupiter. Herein the masses of Saturn and Jupiter, along with their moons, are considered important because of how they balance the rest of the solar system. In Jyotisha, 11 *upagraha* (sometimes called 'secondary planets and

moons') are used. If these are added to the nine primary *graha* – Sun, Moon, Venus, Mercury, Mars, Jupiter and Saturn plus the shadow planets, Rahu and Ketu (intersecting elliptic formed by the Sun and the Moon with respect to Earth, above and below, respectively called the northern and southern nodes); this means that a total of 20 planetary and luminary energies impact or seize us.

The Moon covers the same 360° of the sky in one synodic lunar month (the time it takes the moon to go from one new moon to the next) that the Sun covers during one sidereal year (the time it takes the sun to pass through all 12 constellations of the zodiac). The Sun's 360° cycle is divided into 12 months of 30° each whereas the Moon's cycle is divided into 30 days of 12° each. A lunar month is thus a mirror image of the solar year. And hence lunar energy (*soma* or negative ions) affects us more on a monthly basis while solar energy (*agni* or positive ions) impacts more on an annual time-scale. Note that an average soli-lunar year (based on a mean of 365.26 days of the solar sidereal year and 354.37 days of the lunar synodic year) is also about 360 days consisting of 40 nine-day/night periods (*navarātri*) and 9 forty-day periods (each such 40-day period is a *mandala*).

We might note, the Moon traverses 27 (+1) lunar mansions during a sidereal lunar month (27.32 days); whereas one synodic lunar month is the time it takes the Moon to go from new moon to the next (29.53 days). Thus an average lunar month is considered to be 28 days. Each of these lunar mansions has a specific Sanskrit name or *naxatra*. Therefore a person born in a specific *naxatra* is traditionally identified with a birth star based on the name of a particular lunar mansion.

☞ New moon of silence and ritual holy bathing

On a new moon, the Sun and the Moon are overlapping and aligned with respect to the Earth, signifying the imbuing of light in the emptiness of the mind so that the consciousness can be revealed. The meditator is now ready for the conception of the light of consciousness in the heart having conquered not only the emotional and physical disturbances but also the remaining subtle desires.

The Chinese New Year starts on a new moon known in the Vedic Sanskrit tradition as the *mouni-āmāvasyā* or the new moon of inner silence. A deep meditator who becomes completely absorbed (*samādhi*) and attains higher realization is known in Sanskrit as *muni*. This root word transforms into *mouni* or the great silence of deep meditation. When appended with *āmāvasyā*, denoting the new moon, this word *mouni-āmāvasyā* implies the silence of the great void – a silence attained through deep meditation whereby all remaining internal chatter and imagery are conquered. In other words, the limit of perception is reached after overcoming all thought waves from subtle impressions in the heart. Herein the metaphor of darkness is aptly connected with the mystery of the new moon.

This yearly new moon day (*mouni-āmāvasyā*) becomes memorably significant when celebrated during the *kumbha-melā* ritual holy bathing period in India. This

particular *kumbha-melā* day is remembered as the largest holy bathing congregation in the world. On this day, millions of devotees take a dip in the confluence of Ganga and Yamuna flowing within an area of less than 20 square kilometres.

A momentous event such as this takes place when special planetary transits herald such a mass ritual cleansing. Sanskrit literature provides detailed guidance about these occasions when waters will be charged with the subtle blessings. However, this holy bathing has more to do with one's own subtle vows and affirmations than just a mad rush to forsake all demerits! *Kumbha* means a pitcher, wherein wine of the mystic is stored. It is also the Sanskrit name for Aquarius. The zodiac sign Aquarius is hailed for imparting mystical characteristics. Bathing in this elixir is akin to a refreshing restart, a rejuvenation that symbolizes the washing away of obstacles by effecting a subtle mental purification.

On such special days, monks, yogis, mendicants and spiritual figureheads take their bath through a collective procession based on their order or affiliation and pre-assigned times for their own councils and consortiums. Thereafter, the brave devotees take their much-awaited dips by plunging into the waters with a leap of deep faith while putting aside concerns about being caught in a stampede. With such a rush, devotees take extra care in positioning themselves within the realms of the confluence of river waters.



Ganga and Yamuna are known for their subtle purificatory powers which are said to be increased manifold on such auspicious days. Even though there is no physical evidence of erstwhile Saraswati merging its waters into this confluence, most devotees believe that the confluence carries the waters of three rivers. Many monks, scholars and geologists consider the Tamasa river as the main remnant of the ancient Saraswati river. The Tamasa river drains its waters into Yamuna in the lower Himalayas, thereby making the confluence with Ganga effectively carry three river streams.

Metaphorically, Ganga and Yamuna are likened to the two sympathetic ganglia in front and on the sides of the spinal cord and are connected with the breath in the two nostrils. Herein the hidden Saraswati is beheld akin to the *sushumnā nādi* or the central canal of the spinal cord. Meditation and its breathing techniques allow *prāna* to be stabilized and balanced inside this *nādi* resulting in superseding the regular breathing. At dawn and dusk for a period of about half an hour at each time, the daily *prāna* rhythms in their natural course bring about equal breath in both nostrils and the *sushumnā* is said to be activated.

☞ *Eclipses are opportunities for meditators*

Eclipses are deemed as rare opportunities for seekers and devotees to immensely embellish the depth and momentum of their personal introspection. Whereas eclipses and their effects have been feared by most traditions and cultures, meditators patiently wait for such moments to come forth. This is because the depth and power of meditation increases manifold during an eclipse. In short, while it is not recommended by Sanskrit literature to be out and about undertaking worldly chores during an eclipse, such an event brings an excellent opportunity for enhancing one's spiritual practice. When mindfully applied during an eclipse, regular and persistent practice of meditation can culminate into a new level or the attainment of a special result, a *siddhi*. From this perspective, a total eclipse is a greater opportunity to excel in meditation, while a partial eclipse is somewhat less of an opportunity but nevertheless still not worth missing. Seekers in countries where the eclipse is only partially visible can still embrace the meditative practices even though the effects will be milder; however, if the eclipse is not visible at all, the meditation benefits do not multiply.

In general, eclipses indicate an interruption of the energy of the luminaries and hence are deemed as important events for life on Earth. The effect of an eclipse on each individual is different and depends on their particular position or placement of luminaries at the time of birth. This is calculated accurately by Sanskrit-based Jyotisha which astronomically maps the coordinates of the heavenly bodies of the solar system at the time of birth using the Vedic soli-lunar calendar. Typically the effects last for six months if the eclipse is of particular significance to an individual, whereas it can last for a year if relevant to a country. If and how an eclipse affects an individual is a specific and detailed calculation and is in itself a vast subject.

For a meditator to gain the maximum benefit, Sanskrit literature and tradition suggests fasting for 12 hours ahead of the umbral start time for a solar eclipse and 9 hours in the case of a lunar eclipse. This is of course difficult to practise with the modern lifestyle, especially on a work-night. However, some of the other aspects of preparing for an eclipse could perhaps be done, such as fasting during the entire penumbral period (which includes the umbral portion) and even abstaining from drinking water during the eclipse. Drinking just enough water ahead of time might avoid interruption of the spiritual practices during the eclipse. It is traditional among those who follow the eclipse routine to take a wash (a shower) right at the onset of the penumbral entry and then take another shower at the end of the umbral period before the end of the penumbral period. The two showers are associated with two changes of fresh clothes. Breaking the fast after the end shower is also alright.

Meditation (with eyes closed!) is better practised without directly watching a solar eclipse. Pregnant women are strongly advised to stay indoors and avoid catching a glimpse of the solar or lunar eclipse. Therefore, those who plan to meditate during an eclipse or are preparing to intensify their existing meditative introspection, usually practise to maximize the overlap with the period of the total eclipse (the central part of the umbral portion). It might be necessary to extend the meditation time by repeating the regular meditation practice a number of times. In that case, repeating a sequence an odd number of times (such as thrice) is better than an even number. However, the depth and quality is more important than mere repetitions.

✧ *Transcending rhythms and cycles*

Wisdom teachings from the Sanskrit heritage guide the seeker towards a daily meditation practice that transcends the barriers of emotional remnants from performing prescribed duties. Herein meditation mends the mind by overcoming emotional and physical disturbances. However, the greater virtue of meditation lies in the continuous purification of the *chitta* (mind, ego and intellect) in the subtle heart. Sanskrit texts define this subtle heart as the soul, which can be seen in deep meditation (seeing without the use of subtle sense organs!).

A wise saying declares that invoking a God-centred life brings about fulfillment, such is the experience. Practising daily mindfulness with breath awareness brings about an understanding of the entrapments from expanding the experience of the world. Anchoring oneself in one's own daily meditation practices defined by structured techniques manifests the highest purification of internal tendencies and latent impressions lodged in the mind-stuff (*chitta-suddhi*). Thereafter a pure-hearted mind beholds the ultimate knowledge or realization of being that transcends subtle feelings and the thoughtless void. While the journey is outlined clearly in Sanskrit, it is helpful to know that our affirmations towards the goal become more meaningful when we synchronize them closely with a certain cosmic time-space coordinate based on a proven dynamic calendar from our ancient heritage.

The affirmations, spiritual vows and daily meditation based on this greater synchronization are necessary until living liberation is attained. Those joining the path of inner awakening or just starting on this journey of mindfulness often wonder how the liberated souls or enlightened beings can remain silent for so long or do not get bored without doing something or other. Most who cannot relate to the validity of spiritual discipline and the transcendental states of being attained thereafter may even conceive of God as being occupied with puny activities.

A liberated being has no sense of time to feel bored and moreover by anchoring in the inner silence they become mighty performers and a noble wish in such a case fructifies easily. Such free beings do not cultivate 'wishful thinking' or get unnecessarily busy with the world. Virtues cling to them on account of their tranquil mind. Hence it is no surprise that the new year in most traditions begins at a point of transition based on a new moon; herein a new moon is symbolic of no mind or no thoughts and no mental images. If voluntary action (*purushakāra*) is guided towards a profound meditation practice, a seeker may obtain liberation in a single birth. Such is the promise of Sanskritic wisdom.





Total Number of Nādi in the Human Body

The network of pathways or channels through which vital energy or *prāna* moves in the physical and subtle bodies is called *nādi*. The energy channels include nerves, neuro-muscular junctions, lymphatic chyle, blood vessels and the cerebrospinal fluid (CSF). For example, the oft-referred *sushumnā nādi* moves *prāna* along the spine through the CSF into the brain. The sympathetic ganglia on two sides of the spinal cord are known to be the field of *idā nādi* and *pingalā nādi*. In extant Sanskrit literature, *nādi* has been used as both the unit of space and time, because of the special relationship between time and space. In units of time, 24 minutes is referred to as one *nādi*. The calculation below refers to the conduits of vital energy.

PRASHNA UPANISHAD – CHAPTER 3, VERSE 6

हृदि ह्येष आत्मा । अत्रैतदेकशतं नाडीनां तासां शतं शतमेकैकस्यां
द्वासप्ततिर्द्वासप्ततिः प्रतिशाखानाडी सहस्राणि भवन्त्यासु व्यानश्चरति ॥

TRANSLATION OF THE SANSKRIT VERSE

Indeed the conscious entity which is the sole seer abides in the heart. Herein there are 101 principal nādi. Each of them has 100 branches. Every one of these has 72,000 sub-branches in which the Vyāna moves.

Calculation of total number of nādi

101 principal *nādi* multiplied by the 100 gives us 10,100 branches. Each multiplied by the 72,000 yields 727,200,000 sub-branches. Upon adding the 101 principal *nādi*, 10,100 branches and 727,200,000 sub-branches together, we find a total of 727,210,201 *nādi* in the human body!



Lifeforce as Five-fold Vital Energy

Prāna is that vital energy which sustains the body.

Breath is the link between the body and the mind.

Prāna, Udāna, Vyāna, Apāna, and Samāna evolve out of the *chitta* (mind-stuff) and help sustain all seats of instruments, both external and internal.

Prāna

Transfers external input or sensations by linking external energy (due to *ajhirshābodha*) through the subtle sensory organs into the three-fold *chitta* (mind-stuff), while sustaining the *chitta* as the internal instrument of knowledge inside the subtle heart.

Udāna

Maintains internal awareness of all constituents of the body and guides the subtle body to leave upon closure of earthly life.

Vyāna

Sustains all motor parts of the body, both voluntary and involuntary, and guides all muscular movements.

Apāna

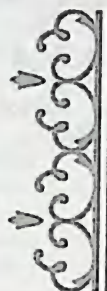
Segregates and helps excrete all unwanted and waste products from the body.

Samāna

Converts input of food and nourishment to useful ingredients for absorption in the body.



Soli-lunar Rhythms & Sexagesimal System



The Vedic soli-lunar calendar is dynamic wherein complicated rhythms of the celestial bodies are mapped, with respect to both the Sun and the Moon, onto our biorhythms and daily routines. Here on Earth, according to the latitude and longitude of our location, the cosmic motion of luminaries and planets along with the rotation of Earth map the biorhythms influencing us on a daily basis. Thus the soli-lunar calendar is essentially a *prāna* calendar. Our resting heartbeat of one beat per second is considered to be the rhythm at the root of this calculation. Thus the *prāna* calendar is based on a cycle of 60 as per the sexagesimal system. The following four sections summarize the salient features of this soli-lunar biorhythm based on the cycles of 60 or its factors.



SEXAGESIMAL FACTORS

15 breaths in 1 minute
 6 breaths in 24 seconds
 360 breaths in 24 minutes
 21,600 breaths in 24 hours
 1 *nādi* = 24 minutes
 1 *muhurta* = 48 minutes
 1 *lagna* ≈ 2 hours
 1 *ghati* = 2 hours
 60 has 12 factors:
 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30
 & 60
 60 is the smallest number
 divisible by every number
 from 1 to 6

SOLI-LUNAR CYCLES

Sidereal solar year = 365.26
 days (*the time it takes the
 sun to pass through all 12
 constellations of the zodiac*)
 Sidereal lunar month = 27.32
 days (*the time it takes the
 moon to pass through all 12
 constellations*)
 Synodic lunar month = 29.53
 days (*the time it takes the
 moon to go from one new
 moon to the next*)
 Average lunar month
 = 28 days
 Lunar asterisms covered
 are 27 + 1
 12 synodic lunar months
 = 354.37 days
 Average soli-lunar year
 = 360 days

MALE & FEMALE RHYTHMS

Moon covers the same 360° of
 the sky in one synodic lunar
 month that the Sun covers
 during one sidereal year
 Sun's 360° cycle is divided
 into 12 months of 30° each
 Moon's cycle is divided into
 30 days of 12° each
 A lunar month is a mirror
 image of the solar year
 Male rhythms are governed
 more by the Sun
 Female rhythms are governed
 more by the Moon
 Cycles of one soli-lunar year
 or circannual year affect
 blood chemistry, hormone
 secretion, brain activity and
 appetite

COSMIC BEAT & BREATH

15 breaths per minute
 = 21,600 breaths
 in 24 hours
 360 breaths in 24 minutes
 or in 1/60 of a day
 360° of sky-arc pass over the
 horizon in one day
 1/60 of 360° = 6°
 = 360 minutes of arc
 360 breaths in time cover 360
 minutes of arc in space
 During one breath, the
 heavenly bodies move in
 space by one minute of arc
 Breathing with one nostril at a
 time, switching once in
 2 hours; starting after
 dawn based on lunar
 waxing and waning;
 with both nostrils breathing
 at dawn and dusk
 Resting heart beat = 1 beat per
 second
 4 heart beats in a breath



Assignment of Days of the Week

The table outlines an assignment enumerating how the days of the week have come to be regarded in the sequence we use. The Vedic science of luminaries and planets, Jyotisha, takes into account the impact of 9 *graha* and 11 *upagraha*, totalling 20 celestial bodies that impact or seize us. Herein *graha* means a primary planet, luminary or celestial energy centre, whereas *upagraha* points to other planets and moons whose impact is considered secondary. Excluding the northern and southern energy nodes (shadow planets, Rahu and Ketu), only seven principal *graha* are taken into consideration in this table as per the sequence in creation. Out of these seven, the Sun is the first created while Mars is created last breaking away from the Earth. As per the Vedic Sanskrit texts, with respect to Earth, the sequence of Sun, Venus, Mercury, Moon, Saturn, Jupiter and Mars constitutes the order in creation. They are assigned beginning with the first hour from sunrise on the first day (see note below). The set of seven are repeated from the eighth hour onwards until all hours of the day (24 hours) and the week (168 hours) are assigned chronologically. The first hour of each day essentially defines the day of the week. The weekday is assigned to the ruling *graha* of the very first hour of the day. Thus the sequence of the seven *graha* by day of the week does not match their original order of creation in our solar system.

Note

The first hour of the day for the purposes of this table begins at the time of sunrise, not at midnight. Vedic sunrise is the time when the middle of the Sun's disk rises above the eastern horizon. The refraction effect enables the Sun to first become visible even when it is still below the eastern horizon. All determinations are based on when the middle of the disk becomes visible at the eastern horizon. Most media resources publish the modern astronomical time of sunrise and sunset. Astronomical sunrise is defined as the time of the first appearance of the upper limb of the Sun. The sunset is the moment of disappearance of the upper limb of the Sun. The 'limb' refers to the edge of the disk of the Sun and Moon. Hence, most resources provide sunrise timings when the edge of the disk or the upper limb is just visible above the eastern horizon. Similarly, sunset timings are provided indicating when the Sun completely disappears below the horizon.

Vedic sunrise = astronomical sunrise + time taken by the Sun to rise by half of its diameter + time taken by the Sun to rise further to neutralize refraction effect.

Vedic sunset = astronomical sunset - time taken by the Sun to set by half of its diameter - time taken by the Sun to set further to neutralize refraction effect.

Sun 1		Mon 2		Tue 3		Wed 4		Thu 5		Fri 6		Sat 7	
Sun	1	Moon	25	Mars	49	Mercury	73	Jupiter	97	Venus	121	Saturn	145
Venus	2	Saturn	26	Sun	50	Moon	74	Mars	98	Mercury	122	Jupiter	146
Mercury	3	Jupiter	27	Venus	51	Saturn	75	Sun	99	Moon	123	Mars	147
Moon	4	Mars	28	Mercury	52	Jupiter	76	Venus	100	Saturn	124	Sun	148
Saturn	5	Sun	29	Moon	53	Mars	77	Mercury	101	Jupiter	125	Venus	149
Jupiter	6	Venus	30	Saturn	54	Sun	78	Moon	102	Mars	126	Mercury	150
Mars	7	Mercury	31	Jupiter	55	Venus	79	Saturn	103	Sun	127	Moon	151
Sun	8	Moon	32	Mars	56	Mercury	80	Jupiter	104	Venus	128	Saturn	152
Venus	9	Saturn	33	Sun	57	Moon	81	Mars	105	Mercury	129	Jupiter	153
Mercury	10	Jupiter	34	Venus	58	Saturn	82	Sun	106	Moon	130	Mars	154
Moon	11	Mars	35	Mercury	59	Jupiter	83	Venus	107	Saturn	131	Sun	155
Saturn	12	Sun	36	Moon	60	Mars	84	Mercury	108	Jupiter	132	Venus	156
Jupiter	13	Venus	37	Saturn	61	Sun	85	Moon	109	Mars	133	Mercury	157
Mars	14	Mercury	38	Jupiter	62	Venus	86	Saturn	110	Sun	134	Moon	158
Sun	15	Moon	39	Mars	63	Mercury	87	Jupiter	111	Venus	135	Saturn	159
Venus	16	Saturn	40	Sun	64	Moon	88	Mars	112	Mercury	136	Jupiter	160
Mercury	17	Jupiter	41	Venus	65	Saturn	89	Sun	113	Moon	137	Mars	161
Moon	18	Mars	42	Mercury	66	Jupiter	90	Venus	114	Saturn	138	Sun	162
Saturn	19	Sun	43	Moon	67	Mars	91	Mercury	115	Jupiter	139	Venus	163
Jupiter	20	Venus	44	Saturn	68	Sun	92	Moon	116	Mars	140	Mercury	164
Mars	21	Mercury	45	Jupiter	69	Venus	93	Saturn	117	Sun	141	Moon	165
Sun	22	Moon	46	Mars	70	Mercury	94	Jupiter	118	Venus	142	Saturn	166
Venus	23	Saturn	47	Sun	71	Moon	95	Mars	119	Mercury	143	Jupiter	167
Mercury	24	Jupiter	48	Venus	72	Saturn	96	Sun	120	Moon	144	Mars	168

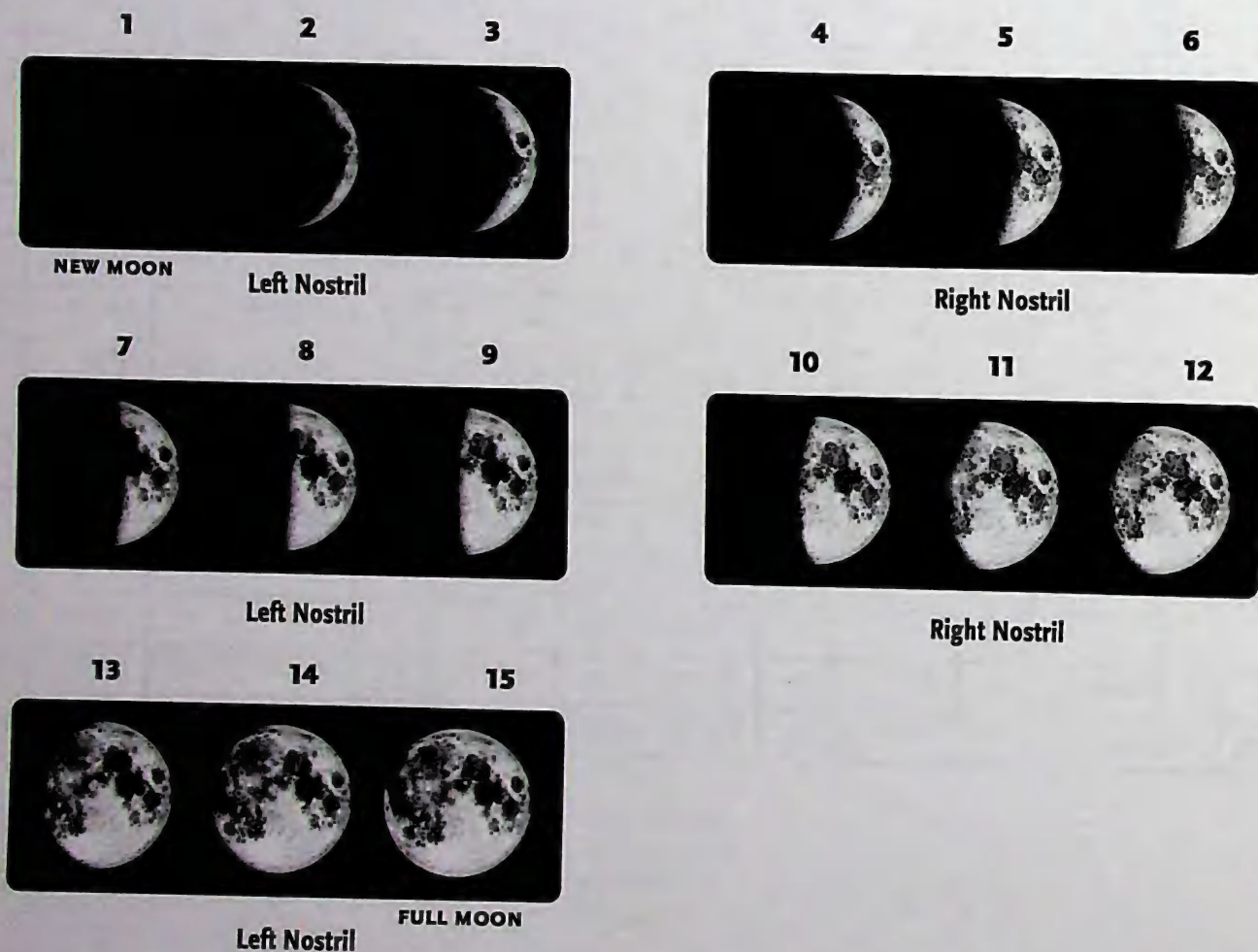


Nostril Dominance in Soli-lunar Rhythms of Breath



The diagram shows the progression of the nostril dominance immediately after the dawn period based on the lunar phase of waxing and waning days. The nostril dominance shown here is only for the first two hours after the roughly half hour twilight of dawn. Thereafter, the breath switches alternately every two hours. During the dawn, the breath is equal in both nostrils. The left nostril breathing (lunar *nādi*) dominates on days 1, 2, 3, 7, 8, 9, 13, 14 and 15 of the waxing moon phase immediately following the equal breath of dawn. Similarly, the right nostril breathing (solar *nādi*) dominates on the same days of the waning moon phase immediately following the equal breath of dawn. Likewise, the right nostril breathing dominates

Nostril Dominance during Ascending Moon



on the days 4, 5, 6, 10, 11 and 12 of the waxing moon phase, whereas the left nostril breathing dominates on the same days of the waning moon phase, immediately following the equal breath of dawn. Switching alternately every two hours, breath is again equal in both nostrils for about half an hour during the dusk; thereafter continuing to switch alternately every two hours. Thus *shushumnā nādi* is said to be naturally activated at the junctures of light and dark periods during roughly half hour twilight transitions. There are dynamic adjustments that come about due to the complicated and shifting movement patterns of the Moon with respect to the Earth, such as during a 13-day fortnight.



Nostril Dominance during Descending Moon

1

2

3



FULL MOON

Right Nostril

4

5

6



Left Nostril

7

8

9



Right Nostril

10

11

12



Left Nostril

13

14

15



NEW MOON

Right Nostril



Nostril Dominance before Dawn



The table outlines the nostril dominance of breathing during the last two hours before dawn when the breath is equal just before sunrise. This period of two hours before the twilight or roughly two and half hours before the sunrise is also known as *Brahma-muhurta*. The starting time of this two hour nostril dominance period is considered auspicious for waking up, cleansing and then practising meditation. Many yogis practice their yoga-vinyāsa techniques during this time period; devotees consider this time to be ideal for worship. The first row characterizes the masculine or feminine aspect of the *graha* so that the correlation with the nostril breath can be better understood. It is clear that the masculine energy of the *graha* is related to right nostril solar (*nādi*) dominance and vice versa. Jupiter, the ruling lord of Thursday, balances distribution based on the waxing or waning moon phase. Therefore, on a Thursday during the last two hours before dawn of a descending cycle of the moon, the left nostril (lunar *nādi*) will dominate the breathing.

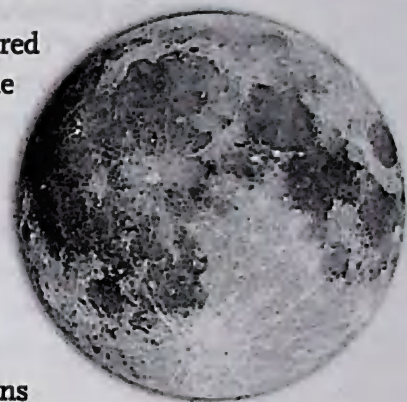


Sun	Mon	Tue	Wed	Thu		Fri	Sat
Right Nostril	Left Nostril	Right Nostril	Left Nostril	Right Nostril	Left Nostril	Left Nostril	Right Nostril
				Waxing Moon	Waning Moon		



Soma Rejuvenation from Full Moon

Contemplative moonlit walks or gatherings are a time-honoured tradition at the time of the full moon. One can easily find the peak full moon time and date in one's own location (latitude and longitude) by using web-based resources. Everyone should feel encouraged to find the peak full moon time in their area whenever not sure.



The peak full moon happens when the Moon is directly opposite the Sun during its twelve-degree overlapping transit. Tradition calls for gazing at the Moon just before dawn if the peak full moon happens before the sunset of a particular day but was not at its fullest the previous evening. Similarly, gazing at the full moon can be done in the evening before retiring if the peak full moon actually happens to be after the sunset.

The pre-dawn viewing is often necessary because the peak full moon can be staggered nearly in between two consecutive evenings, neither of which might show the fullest moon. For auspicious functions to be scheduled in the morning on a full moon day, the Moon within six degrees before crossing the Sun at the time of sunrise is considered optimal.

The moon is hailed as the giver of *soma* (subtle nectar settling in nature due to moonlight). The full moon bestows a subtle mental coolness that is as sweet as nectar and rejuvenates the mind. Sanskrit literature hails the Moon to be the indicator of mind. It has synergy with water and negative ions, as found in the mist by the sea, whereas the Sun is the *agni* and synergistic with fire and positive ions. Sanskrit literature places the Sun akin to a self-lit conscious entity or simply the lighted-soul principle. On a full moon night, the *soma* replenishes all plants and especially the medicinal herbs. And matching the harvesting with the lunar cycle coupled with organic growing principles prevents bugs from infecting the plants.

A profound meditation tradition calls for a direct fixation on the full moon. The practice urges the meditator to take position and undertake an open-eye meditation on the rising moon. The rising moon is minutely tracked with continuously focused attention without straining the eyes. Blinking is consciously undertaken if the Moon appears to double up horizontally. Following an initial effort, the eyes remain effortlessly open and gradually the mind gets fixated or confined on the distant moon.

In this meditation, the eyes become focused in the distance and therefore do not yield to watering or discomfort. As usual in any meditation, spontaneity is important. Strain from keeping the eyes open implies improper technique. Too much effort or repeated distraction might diminish the divine enchantment. When done correctly, one can imbibe coolness in the mind with this meditation. Even a short successful meditation brings about a cooling rejuvenation and a clearing of the mind.

Weather permitting, one is urged towards an undisturbed sighting of the full moon to gather the merits from a cooling meditation. A regular meditator with a predefined meditation routine should plan for an extended practice in and around the full moon period. For a beginner in the tradition of moon-gazing, even a contemplative walk under the full moon can be a magical experience.



Soma Rejuvenation from Ritual Bathing

— Guidance from Sanskrit scriptures

Taking a shower or bath before sunrise promotes well-being; a ritual bath before morning meditation is ideal. The Sanskrit term for early morning bathing is *prātaḥ-snāna*.

An early morning cold bath increases peace of mind. One may start with warm water, but slowly switching to cold water is recommended. Meditators need to shower or cleanse before beginning their practice. Whereas a warm water bath cleanses physically, cold water revitalizes the subtle body, removing the influence of sleep and dreams.

Hot water should not be used on the head; hot water is not favourable for the eyes. Eyes should be flushed with chemical-free cold water. Different sources of water have different powers to cleanse. Thus there is a grading of water according to the source. Bathing in holy or sacred water is most auspicious; water from a holy pond (*kundam*) is also hailed for its healing properties.

— Seven types of ritual bathing

Pārthiva-snāna	Using earth (or mud bath which has been mixed with herbs or a potion)
Varuna-snāna	Using water only or taking dips in still or flowing water as in holy bathing
Āgneya-snāna	Smearing with sacred ashes that are remaining from a properly conducted fire ceremony
Vāyavya-snāna	Wafted by air filled with dust raised by running cows at dusk (<i>Godhuli lagna</i>)
Divya-snāna	An ethereal shower in the rain while the sun is shining
Mantra-snāna	Chanting appropriate Sanskrit verses while sprinkling oneself with water
Mānasika-snāna	Meditating on the beatific and merciful Lord (scanning feet up to crown and then back to feet)

Note

The choice of bathing type depends on personal vows, opportunities and facilities. Typically the preference is based on an understanding of *prāṇic* biorhythms, diurnal rhythms of the Vedic soli-lunar calendar, and auspicious occasions which relate to a specific type of bathing. Holy bathing can be undertaken any time but is more important on specific days of the soli-lunar calendar and according to local historicity (*sthala-purānam*).



Soma Rejuvenation using Water

1. The ideal time to meditate is during *Brahma-muhurta* defined either as two hours before sunrise (just before twilight) or as between 3:30 am to 5:30 am where there is some light throughout the night during the summer months (such as in countries near the North pole). After waking up early, take a mildly cold to cold shower. You may start with warm water but progressively switch to the colder settings and have the main part of your shower using cold water (even chilled water at the end). From a cold shower, the head feels cold thus making the mind calm but the body becomes mildly agitated, which is what you need for the meditation that follows.
2. Drink at least two full glasses of warm or room temperature water after waking up. If you cannot drink so much from the first day onwards, please start with one glass and add half a glass after a week and then make it two full glasses after the second week. From the springtime onwards and throughout the summer, you can keep on adding half a glass after every week or after every two weeks until you reach up to four glasses of water in the morning. Do not eat anything else until meditation is over or you have urinated copiously, whichever is later. Drink water copiously (ten glasses a day). The water should be slightly alkaline or micro-hydrated or from a clean deep well or from a reliable source containing high *prāna*. At the end of the summer, you can bring down the dose of morning water in a similar manner stepwise and hold it constant at one glass during the winter months.
3. Here is an excellent way to wash and freshen up. You can do this as part of your morning routine after scraping your tongue. Firstly, fill your mouth up with warm water and puff up your cheeks by sipping five times, each time retaining the water. The fifth time, retain the water in your mouth with puffed up cheeks. Secondly, holding this state, scoop up cold water in the palms of your hands and gently flick the water into your open eyes to flush them out. Do this eleven times, each time making sure your eyes are wide open before flushing. Then release the water from your mouth and rinse; do not drink this water. Thirdly, scoop up cold water in your hands and rinse the crown of your head. Do this five times. There may be situations when you cannot do this last step because it will wet your hair, but you can still do the first and second steps. When you feel tired, check whether your face feels oily and – if so, please wash your face using the first two steps; you may use this method two to three times during the day in addition to the first time in the morning.

4. Sip warm or room temperature water between courses in your meal; do not drink excess water with your food; avoid drinking water while eating fruits. Drinking a lot of water before the meal might make one lean, whereas unnecessary intake of water at the end of the meal might make one put on weight. It is best to sip some water during the meal, which helps digestion and maintains balance in the body.
5. Wash your mouth thoroughly a few times after each meal or food intake – by swirling water and puffing up the cheeks and then spitting out the water; wipe your lips clean. Wash your hands before and after meals.
6. Wash your feet thoroughly and wipe gently before retiring to bed at night.
7. Get somewhat wet from the mist or fog whenever possible, especially by way of beach walks.

Note

Rejuvenation, freshening up and a feeling of clearing will greatly depend upon the quality of available water that is used (such as high *prāna*, clean, micro-hydrated, less chemicals, etc.) and will somewhat depend upon how tired one is before beginning these exercises.





Life Energy
Balancing Breath





Ujjāyi Prānāyāma

Ujjāyi breathing is one of the foundational techniques of *prānāyāma*. *Ujjāyi* is typically done in a traditional sitting posture (*āsana* or *mudrā*). Most frequently, the common postures such as *Padmāsana*, *Swastikāsana*, *Siddhāsana* and *Vajrāsana* utilize this *prānāyāma*. Meditation techniques which use these symmetrical still postures use *ujjāyi* to develop subtle control of breath flow leading to internal breathing whereby ultimately breath ceases to be felt outside the nostrils. Similarly, all *yoga-vinyāsa* movements require controlled breathing in the form of *ujjāyi*. Thus both still postures and *vinyāsa* movements employ *ujjāyi* wherein subtle and long breathing becomes internal breathing. In the case of still postures, body awareness is transcended by a state called *parāvastha*, while in *yoga-vinyāsa* sequences, the movements and transitions become juxtaposed and superimposed on the synchronized *ujjāyi* repetitions.

The control of breath is attained in the throat at the glottis and hence *ujjāyi* is often called throat breath as opposed to normal nasal breath. *Ujjāyi prānāyāma* is known to have variations, especially with respect to the inner attention on guiding the energy between specific end points located within the body. Thin and long *ujjāyi* specific to the subtle energy pathway, *sushumnā nādi*, is considered a higher *prānāyāma*.

The technique involves controlling the duration and flow of inhalation or exhalation at the glottis between the larynx and trachea. The yogin learns to focus at the back of the throat and voluntarily contracts the muscles of the larynx next to the vocal cords. The breath control is reproducibly mastered through the voluntary impulse of the vagus nerve which facilitates the muscular contraction. Therefore, the control that is initiated at the vagus nerve causes muscular contraction and ends up generating a somewhat muffled hissing sound during the breathing due to proximity of the vocal cords. The glottis, which closes completely during swallowing and otherwise remains open, now partially closes and helps in regulating the air passage. This hissing sound which is at the beginning indicative of correct *ujjāyi* practice becomes subtle, thin and long when the yogin becomes an adept. Increasing the constriction on the back of throat increases the force of breath and a louder sound is produced. When the breath gets subtler, a softer sound accompanies. Once the breath becomes long, slow and smooth, the sound diminishes and the attention shifts to the rubbing sensation along the guided pathway wherein the breath flow is directed.

As with all correctly done *prānāyāma* techniques, *ujjāyi* increasingly impacts the cleansing and rejuvenation of the subtle nerve and energy pathways (*nādi*) and tones specific glands based on how subtly and effortlessly it is done. The markers of correct approach such as a rubbing sensation, internal breath flow, pressure at the site of the glottis, gentle closure at the back of the throat, belly movements, gentle gasp while switching to exhalation, etc. become transcended when *ujjāyi* is mastered and happens naturally from repeated practice. At this level of transparency, the *prāna* can be directed into a *nādi* at will during any *mudrā* either in *flow-vinyāsa* or at stillness.



Basic Postures for Himalayan Prānāyāma Techniques

The following are hints and clues for specific sitting postures (*āsana*) and locks (*bandha*) for the practices of the Himalayan *prānāyāma* techniques, which are to be learnt directly under the expert guidance of an adept. In all of these sitting postures, the torso, neck and head are aligned straight and the spine is held vertical, retaining its natural curvature.

Ardha-padmāsana

Half lotus. Sitting on buttocks on a blanket or on a slightly raised cushion with legs crisscrossed in half lotus is easier and should be done with a periodic switch of legs. If the feet are placed near the groin area, the soles of the feet look like an open lotus and hence the name. Place the locked palms below the navel. Full lotus needs advanced practise and one needs to grow into it over several months if not regularly practising. Incorrectly practised lotus variations can damage the knees. The knees are beheld as most valuable for a meditator and self-guided experimentation is not wise.

Siddhāsana

Heels aligned. Place right heel below the genitals such that the sole of the foot touches the inner left thigh. Then place the left heel on top and push in. The heels will be virtually on top of each other. They are so positioned to press the perineum area underneath. Swap legs and switch the heels. If difficult to balance on the flat blanket, use a small cushion to wedge under the buttocks. The perineum area is contracted and the front opening part of the bottom two chakras are controlled and balanced. It is typical to place the palms on the knees using a specific *hasta-mudrā*.

Swastikāsana

Feet trapped. In this happy posture, the soles of the feet are locked in between the calf and thigh. Place the sole of the right foot between left thigh and calf, and similarly slide the left foot, from top or below the right foot, between the right thigh and calf. Reverse the order for balance and symmetry for each sitting. Palms are typically placed on the knees using a specific *hasta-mudrā*.

Vajrāsana

Thunderbolt. Ready to take the impact of the thunderbolt, this posture is part of an introductory *vinyāsa* sequence. Sitting cupped by the heels upright on the knees can be best effected on a blanket. The calves will touch the thighs. If the toes or heels hurt, use a small cushion to prop underneath. Place palms facing down on respective knees.



Jālandhara-bandha

Throat lock. This lock is practised after holding the breath out or holding an inhalation. The breathing does not resume until the lock is released. A full throat lock calls for the chin to touch the chest below the throat. This lock can be practised during most sitting postures and some standing postures.

Uddiyana-bandha

Abdominal lock. Breath is rapidly forced out after a full breath. The exhalation is completed fully by pulling the belly in and up towards the spine (above the lumbar area) and then the breath is held out for a comfortable time period. If using in conjunction with the throat lock, then first release the throat lock before inhaling. This lock can be practised with most sitting postures, but is more effective in the standing postures.

Mula-bandha

Perineum lock. Constrict the perineum area and pull it upward. This lock is usually more effective with a breath hold. The constriction is at the front opening of the *mulādhāra* chakra. In men it is the prostate area, while in women it is the opening of the cervix. This lock can be naturally aided by the *Siddhāsana* sitting posture.

Ashwini-mudrā

Sphincter contraction. Constrict the anus, pull it upward along the rectum and hold. Release and relax the anus. Repeat the process several times, typically at least 6 times, up to 12 times per session. Otherwise synchronize the 'hold and release' with the inhalation or exhalation as per the requirement of the individual technique. This *mudrā* is named after the horse as it builds special strength akin to horse-power. The name is also based on how the horse contracts and expands its anus after answering the call of nature. This *mudrā* can be naturally aided by the *Siddhāsana* sitting posture. The *mudrā* is well known for aiding the raising of *prāṇa*!



Udgitha Prānāyāma

The following three-step *prānāyāma* techniques, practised while chanting or ruminating on the primordial Om sound, develop awareness of the inner sound current for introspection, contemplation and meditation. The inner sound current greatly assists in practising mindfulness and is to be clearly distinguished from any other unpleasant ringing or misdiagnosed sound in the inner ears which is often classified as tinnitus. The primordial sound has five parts, the A U M which depicts the trinity, along with the *bindu* and *nāda*. Herein the aum can be written as Om in accordance with the Sanskrit rule of combining 'au' into 'o'. For beginners and for the sake of ease, these techniques can be practised without using the *ujjāyi* breath.

Pranava-gānam

1. *Om chanting*. Take a deep inhalation and fill up the belly comfortably. Then sweetly chant with 60% as the 'O' sound, transitioning into the 'M' sound and thereafter hold the lingering 'm' sound. This lingering end part with mouth closed is the *bindu*. What we hear and get absorbed into is the *nāda* which is the internal Om current. Chant with sweetness and do not muffle the sound. Merge into the sound as if you are simply listening and feeling the vibration. Build up to half a minute first and then attempt a minute or more. In advanced practice of this technique (to be learnt under direct guidance), the *ujjāyi* inhalation can be guided up the *sushumnā* across the six chakra nodes in the spine and then chanting the Om as above.

Bhramara-gunjanam

2. *Bee humming*. Use the right thumb to hold the right nostril closed and gently point to the *kutastha* with your index and middle fingers. Exhale with only the left nostril then inhale into the belly through the left nostril. Hold the breath. Become a humming bee. Mimic the sound of the bee with mouth closed. Focus on the vibration of the sound in your right inner ear. Maintain the position of your right hand throughout the technique and only remove your thumb from the nostril after you have stopped humming and have exhaled the remaining breath through the left nostril. This practice uses the *chandra-nādi* (lunar channel) via left nostril breathing.

Nāda-sravanam

3. *Breath-hold listening*. Use the right thumb to hold the right nostril closed, point to the *kutastha* with your index and middle fingers. Exhale with only the left nostril then inhale into the belly with the left nostril. Hold the breath. Move your hands and place the thumbs in the ears to close them to outside sound. Place remaining fingers to cover your forehead and skull (fingers should be spread; index fingers can be reaching the fontanel area). Hold the breath and focus on the inner sounds in your ears (thundering clouds, conch, bells, etc). After you can no longer hold the breath, again close the right nostril with the right thumb, point to the *kutastha* with index and middle finger and exhale. This practice uses the *chandra-nādi* (lunar channel) via left nostril breathing.



Cleansing Nādi

The following *prānāyāma* method presented as three techniques use alternate nostril breathing to bring about purification of the principal group of *nādi*, especially the *idā* and the *pingalā* corresponding to the left and right sympathetic ganglion. This soli-lunar cleansing method assists in the opening of the *sushumnā-nādi* which is the central canal carrying the cerebrospinal fluid (CSF) in the spinal cord. *Ujjāyi* breathing is recommended. In the techniques below the index finger is pointed (not quite touching) towards the *kutastha* or the third eye. The eyebrows naturally extend with their own curvature to a mid-point in between the eyebrows which is the *kutastha*, wherein light is seen.

❧ *Nādi-shuddhi* — *Soli-lunar breathing*

1. *Anuloma viloma*. There is no holding of breath except momentarily during the switch of fingers closing the nostril. Use the right thumb to hold the right nostril closed, gently point to the third eye with your index finger. Exhale completely with only the left nostril then inhale fully and continuously for a count of 6 Om. Close the left nostril with the middle and ring fingers and exhale continuously for a count of 6 Om through the right nostril. Again inhale through the right nostril fully for a count of 6 Om. Close the right nostril with the thumb. Exhale for a count of 6 Om out of the left nostril by gently releasing the middle and ring fingers. Continue the cycle by inhaling and exhaling for a count of 6 Om alternately. The duration of breath between the phases should follow the ratio of 1:1 with hardly any hold. So inhale for 6, and exhale for 6. One cycle is a total of 6 breaths. One may make the inhalation and exhalation longer and more controlled by extending the count to 12 and then up to 18!
2. *Dwimātrika kumbhaka*. There is holding of breath after every inhalation for a double count. Use the right thumb to hold the right nostril closed. Gently point to the *kutastha* with your index finger. Exhale with only the left nostril then inhale for a count of 6 Om. Hold the breath in, close the left nostril with the middle and ring fingers and hold the breath for a count of 12 Om. Now release the thumb and thus open the right nostril. Exhale for a count of 6 Om out of the right nostril. Continue the cycle by inhaling for a count of 6 Om on the right side (meaning reverse the process). The duration of breath between the phases should follow the ratio of 1:2:1. So inhale for 6, hold for 12 and exhale for 6. One cycle is a total of 6 breaths. When you master this, you can increase the factor to 9, 12, 18, etc. (inhale for 9, hold for 18 and exhale for 9, etc).
3. *Trimātrika kumbhaka*. There is holding of breath after every inhale for a triple count. Each exhalation is double the count of inhalation. Use the right thumb to hold the right nostril closed. Gently point to the *kutastha* with your index finger. Exhale with only the left nostril then inhale for a count of 6 Om. Hold the breath in, close the left nostril with the middle and ring fingers and hold the breath for a count of 18 Om. Now release the thumb and thus open the right nostril. Exhale for a count of 12 Om out of the right nostril. Continue the cycle by inhaling for a count of 6 Om on the right side (meaning reverse the process). The duration of breath between the phases should follow the ratio of 1:3:2. So inhale for 6, hold for 18 and exhale for 12. One cycle is a total of 6 breaths. When you master this, you can increase the factor to 7, 8, 9, etc. (for example, inhale for 7, hold for 21 and exhale for 14, etc).



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❧ *Nādi-shuddhi* — *Soli-lunar breathing*

1. ***Anuloma viloma.*** There is no holding of breath except momentarily during the switch of fingers closing the nostril. Use the right thumb to hold the right nostril closed, gently point to the third eye with your index finger. Exhale completely with only the left nostril then inhale fully and continuously for a count of 6 Om. Close the left nostril with the middle and ring fingers and exhale continuously for a count of 6 Om through the right nostril. Again inhale through the right nostril fully for a count of 6 Om. Close the right nostril with the thumb. Exhale for a count of 6 Om out of the left nostril by gently releasing the middle and ring fingers. Continue the cycle by inhaling and exhaling for a count of 6 Om alternately. The duration of breath between the phases should follow the ratio of 1:1 with hardly any hold. So inhale for 6, and exhale for 6. One cycle is a total of 6 breaths. One may make the inhalation and exhalation longer and more controlled by extending the count to 12 and then up to 18!
2. ***Dwimātrika kumbhaka.*** There is holding of breath after every inhalation for a double count. Use the right thumb to hold the right nostril closed. Gently point to the *kutastha* with your index finger. Exhale with only the left nostril then inhale for a count of 6 Om. Hold the breath in, close the left nostril with the middle and ring fingers and hold the breath for a count of 12 Om. Now release the thumb and thus open the right nostril. Exhale for a count of 6 Om out of the right nostril. Continue the cycle by inhaling for a count of 6 Om on the right side (meaning reverse the process). The duration of breath between the phases should follow the ratio of 1:2:1. So inhale for 6, hold for 12 and exhale for 6. One cycle is a total of 6 breaths. When you master this, you can increase the factor to 9, 12, 18, etc. (inhale for 9, hold for 18 and exhale for 9, etc).
3. ***Trimātrika kumbhaka.*** There is holding of breath after every inhale for a triple count. Each exhalation is double the count of inhalation. Use the right thumb to hold the right nostril closed. Gently point to the *kutastha* with your index finger. Exhale with only the left nostril then inhale for a count of 6 Om. Hold the breath in, close the left nostril with the middle and ring fingers and hold the breath for a count of 18 Om. Now release the thumb and thus open the right nostril. Exhale for a count of 12 Om out of the right nostril. Continue the cycle by inhaling for a count of 6 Om on the right side (meaning reverse the process). The duration of breath between the phases should follow the ratio of 1:3:2. So inhale for 6, hold for 18 and exhale for 12. One cycle is a total of 6 breaths. When you master this, you can increase the factor to 7, 8, 9, etc. (for example, inhale for 7, hold for 21 and exhale for 14, etc).



Balancing Agni

The following basic *prāṇāyāma* techniques complement the Kapālabhāti (forehead shining) *yoga-vinyāsa* sequence. The techniques assist in balancing, increasing, cooling and toning the *agni*; and help care for the overall health of the intestines.

Agnisāra-dhauti

Sit in Vajrāsana or stand in *Samasthiti* (standing steady balanced on two feet). Place straightened hands on the knees without locking the arms, if using sitting posture. Bend forward from waist slightly and support with hands using palms placed on the upper thighs, if standing. Exhale rapidly and fully (through the mouth is okay for this technique), pull the belly in and up (concave) and lock using *uddiyāna-bandha* (abdominal lock). Hold the breath out. Perform throat lock to hold without discomfort. Push the belly out and in 12 times (one set) while holding the breath out. Release the throat lock and then inhale. Build up to a minimum of three sets back to back.

Plāvani

Sitting in a steady posture, exhale completely. Next, inhale and distend the belly like bellows with a very full breath. Perform the throat lock to help hold the breath. It should feel as if all the air in the body has accumulated in the belly. Hold the breath in as long as possible. Release the throat lock first and then exhale slowly. Repeat for half a set or 6 times.

Shitali

Sitting in a steady posture, exhale. Roll into a loop and protrude the tongue out of the lips. The tongue will effectively be like a bird beak. The two sides of the tongue are thus curled up and joined to form a tube. The lips will seal the mouth and thus air can be taken in through this tube only! Slowly draw in a cool stream of deep breath. Retract the tongue and close mouth. Hold the breath in the belly as long as possible. When no longer able to hold, release the breath through the nostrils with mouth closed. Repeat 6 times or a minimum of 3 times at a stretch. This *prāṇāyāma* cools the *agni* and is useful during summer heat.

Shitkāri

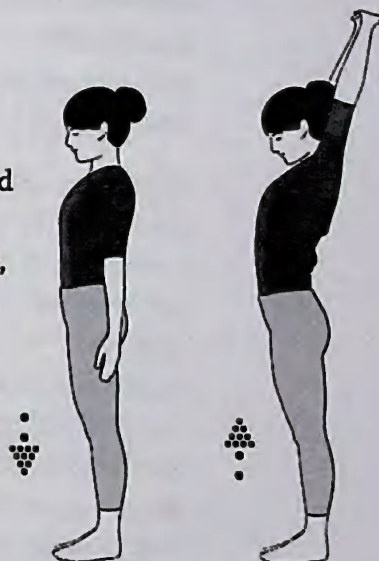
Sitting in a steady posture, exhale. With jaw closed, teeth rows touching and lips parted, press the tongue against the teeth and breathe in making a rumbling 'see' sound. Breathe into the belly fully and then exhale through the mouth right away. Do not retain the breath. Repeat 6 times or a minimum of 3 times at a stretch. This *prāṇāyāma* is cooling and even those with excess phlegm (Kapha) can undertake this practice. Once again this technique is useful during summer heat.



When Breath Leads the Movement in Yoga

In *yoga-vinyāsa*, the movements are led by the breath. This is the original style of yoga practice that integrates the *prānāyāma* stage into the *āsana* practice, helping the yogin to merge the *āsana* stage with the *prānāyāma*. The order that unfolds into a coordinated series is called the *krama*. This sequence contains the intermediate steps of *āsana* postures as defining the *vinyāsa* of the principal *āsana*. Herein one can think of *vinyāsa* as literally “one movement into the next” while *krama* implies “placed in a certain order.” Those intermediate steps are also individual *āsana* but linked with pauses in the breath to structure the flow into a complete sequence of the principal *āsana* to which the whole *vinyāsa* is ascribed. Hence an appropriate name for this style or approach to *ashtānga-yoga* (widely acclaimed eight-limbed yoga of sage Patanjali) is *yoga-vinyāsa-krama*.

One should use the invigorating *ujjāyi* breath during this practice. The flowing movements linking the intermediate postures are superimposed on the *ujjāyi* breath. Thus, the coordinated movements linking the intermediate postures are synchronized with the breathwork. Therefore, the hallmark of *yoga-vinyāsa-krama* is the harmonizing of movements with the breath. Each separate movement is usually associated with an inhalation or exhalation (typically depicted by upward and downward arrows respectively in pictorial guides). Once the practice matures and initial experience has been gained, one may hold the *vinyāsa* or the *āsana* for a specified repetition of breaths using long smooth *ujjāyi* inhalations and exhalations.



The poise and grace of linked *yoga-vinyāsa* movements is like a slowly choreographed dance. Well-performed *yoga-vinyāsa-krama* clearly shows why it can be deemed as a precursor to classical forms of dance. Keen observers of this tradition promptly relate it with certain qualities of classical Indian dance. The higher the quality of the prolonged *ujjāyi* breath, the more deliberate and enriching the movements become. The breath is typically held (*kumbhaka*) or paused in between inhaling and exhaling. While great control may be needed, the movements should also flow gracefully into one another. In the Himalayan tradition hailing from select mountain lineages, the movements are swanlike, graceful and delightful to watch.

While practising the basic techniques of *yoga-vinyāsa-krama*, the breath will rarely become laboured and the pulse rate will not race. Aerobic exercises have their place in building fitness and strengthening the cardiovascular system, but this form of yoga is designed to bring down the breathing rate and reduce the heart rate thus increasing *sāttwika* tendencies such as calmness. This is what makes *yoga-vinyāsa-krama* an ideal preparation for the fifth stage of *pratyāhāra* (natural subjugated state

of the sense organs) in the eight-limbed yoga of sage Patanjali Rishi. A guideline for the duration of *ujjāyi* is 6 seconds as a beginner breath and 12 seconds as a good quality breath. A slow and smooth *ujjāyi* of 18 seconds while moving the body as per the *vinyāsa* is considered a masterful breath. Exhalation and inhalation always ends when the posture is achieved at the end of the transition and all movements cease momentarily. The next movement resumes with the breath again thereafter.

Each *vinyāsa* sequence works on specific groups of muscles and joints. The order of the sequences is carefully designed into a powerful cycle, strengthening the muscles and providing optimum flexion. An important point of this yoga philosophy is how the *prāna* from the synchronized *ujjāyi* breathwork is directed into the cartilage tissue during the movements. Specific *nādi* are targeted during the workout in each *krama* with the aim of directing the *prāna* into cartilages for rejuvenation. The flexion of the spine is given special importance in relation to how the torso and extremities get a workout. In this practice, the counterpose (*pratīkriyā*) is deemed extremely important so that the effects on certain parts of the body including the directional spinal flexions are effectively balanced or neutralized. The *krama* itself includes such counterbalancing poses and built-in transitions, and by no means can these counterposes be skipped or marginalized.

Yoga philosophy also emphasizes the importance of healthy knees for successful practice of the three higher stages of *āshtānga-yoga* namely, attention (*dhāraṇā*), meditation (*dhyāna*) and absorption (*samādhi*), the triad of concentration deemed very relevant to an aspiring meditator. Seated poses and their *vinyāsa* are considered important for *prāṇāyāma* and meditation (collectively the highest three limbs of *āshtānga-yoga*). However, the standing pose *vinyāsa* are deemed primary and fundamental to the growth of the practice into seated *āsana-siddhi* (perfection of *āsana* for meditation). Virtually all major muscles and joints are taken up to be worked upon in *Tālāsana*. The *krama* related to this particular group of standing *vinyāsa* varies based on the root tradition, but by and large bears the same emphasis and employs the same thesis. This beginning sequence is considered to be versatile because several sub-sequences are embedded in it. The fundamentals of compact mini-sequences are also laid out and taught from this cycle, which then helps the practitioner develop a deeper understanding of the value of *vinyāsa-krama*. Even the popular Surya-namaskarah or sun-salutation cycle is deemed to be an invaluable extension of this *Tālāsana vinyāsa* cycle. All of this is launched from the root posture of *samasthiti* or standing on your feet with balance and inward focus.

A posture from which the actual sequence starts can be called the hub pose. However, in the classical tradition of this practice, almost all poses lead off from the standing *samasthiti*. The balancing required for this standing equipoise of *samasthiti* has a way of centring and quietening the mind. The *samasthiti* begins by standing steady and balanced with your two feet together applying equal weight or pressure upon the feet. Then you start guiding the *ujjāyi* exhalation and lower the hands by the side of the flanks. The subsequent basic steps in a *Tālāsana* series are built around raising the arms over the head with hands intertwined and palms facing upward. This is done in conjunction with an inhalation, and then the arms are released down to the sides

with an exhalation. This movement stretches the diaphragm clearing out the lungs, massaging the heart and is deemed good for the lymphatic drainage.

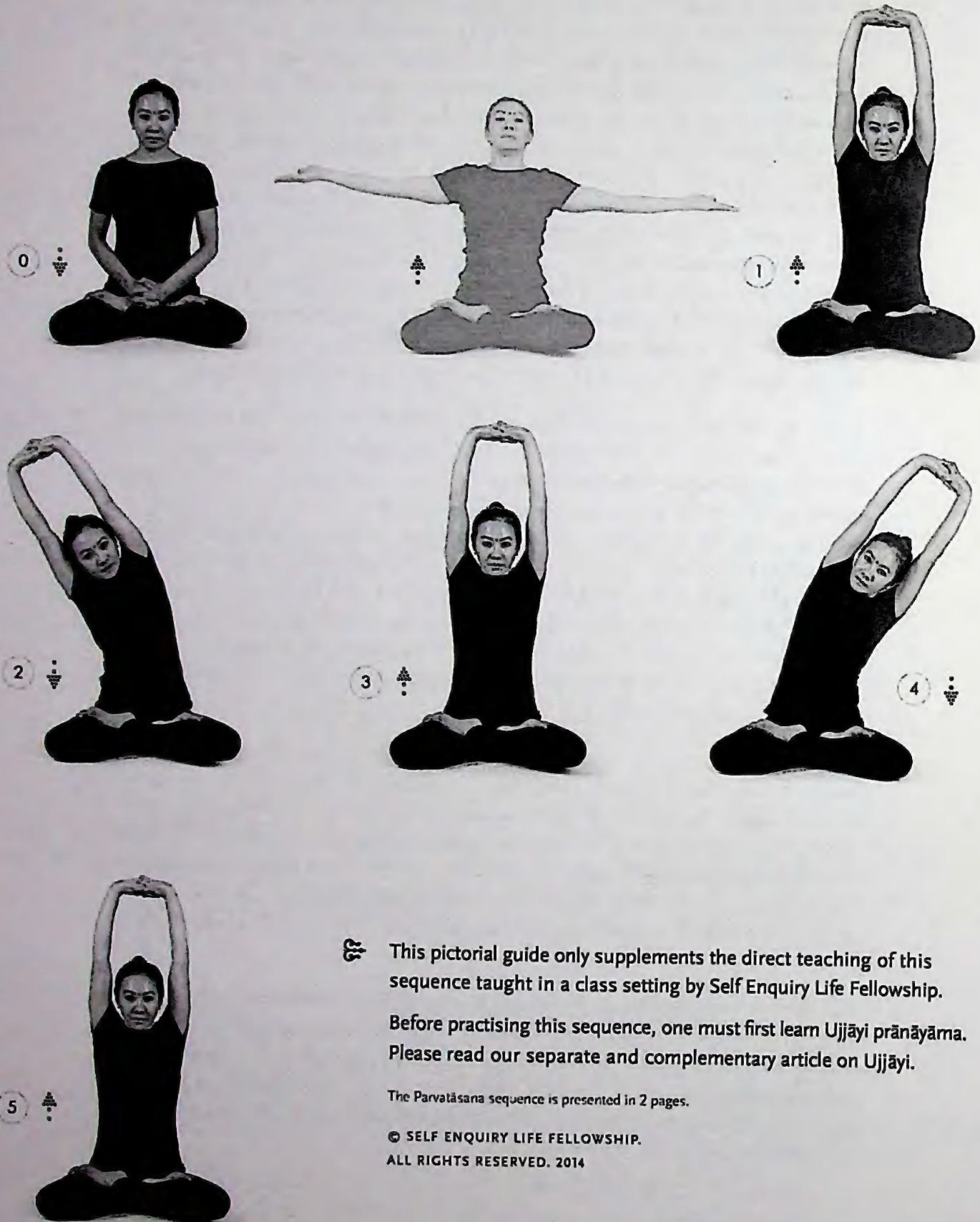
An ardent practitioner of this system will recognize the impact on the cartilages and the spinal discs. In the classical tradition of *yoga-vinyāsa-krama*, cartilage tissue is considered an evolutionary checkpoint in our physical development, and hence deemed to play a critical role in removing physical disturbances hindering a steady meditation practice. While *yoga-nidrā* practice brings about quality relaxation by removing emotional disturbances, it is the practice of *yoga-vinyāsa* that is said to be ideal in removing physical disturbances. The way *prāna* is guided in the *nādi* and how the cartilages are replenished in *vinyāsa-krama* is a master technique that can be learnt properly under the direct guidance of an adept. The emotional disturbances and physical disturbances are deemed as fundamental obstructions in the path of yoga, and this is why the five restraints (*yama*) and five observances (*niyama*) have been structured as the Ten Commandments for the first two stages of the eight limbs of yoga. These ten vows then make way for the *yoga-nidrā* and *yoga-vinyāsa* related to the next two stages of *āsana* and *prāṇāyāma* of *ashtānga-yoga* (eight-limbed yoga).

Rigorous *vinyāsa-krama* can be done at a pace that suits the individual because doing too much or breathing too fast can produce giddiness. Certain sequences demand flexibility and strength in the knees and joints if they are to be achieved with ease and elegance. Careful and patient practice remarkably improves strength in these very key areas and parts of the body. Locks are often used to improve the balance, which is then very helpful when doing *vinyāsa* of the inverted postures. Fundamental to the success of this practice is the degree to which the mind guides the breath during the movement. Once the sequences are mastered and memorized, the movements will seem to be simply superimposed on the breathwork. Hence the mind is said to be minutely guiding the *ujjāyi* breath without any interruption. It is only then *vinyāsa-krama* is said to show results.

How basic alignment of the entire physique is treated, while stretching the muscles and energizing the joints during the flexional movements with guided breath, is an exquisite facet of yoga as an art expression. As again with such graceful movements, it is a good practice to rest in between the *vinyāsa* sequences. This can be in the form of extended pauses separate from the breath-hold pause during the *vinyāsa*. Of course at the end of a full session of *vinyāsa-krama*, it is highly advisable to rest in *savāsana* or the corpse pose for several minutes. This then closes the loop by leading into the practice of *yoga-nidrā*.

The sequences highlighted in the following section are the basic vinyāsa-krama chosen for guiding the practitioner into a regular wellness routine. We recommend that you attend a retreat, workshop or class by Self Enquiry Life Fellowship to learn about a comprehensive system of vinyāsa-krama from one of the esoteric Himalayan yoga traditions. The pictorial guides in this section are designed to assist as an introductory manual and are not intended as a complete set of instructions for beginners.

Parvatāsana Yoga Vinyāsa Krama



This pictorial guide only supplements the direct teaching of this sequence taught in a class setting by Self Enquiry Life Fellowship.

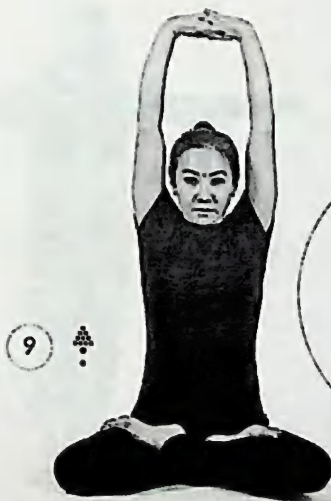
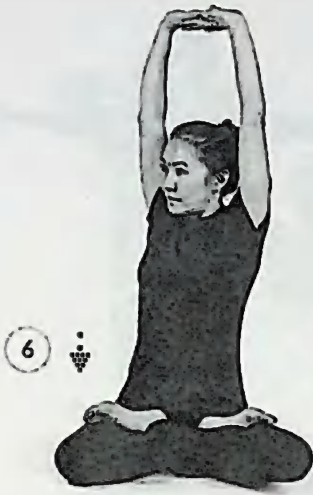
Before practising this sequence, one must first learn Ujjāyi prāṇāyāma. Please read our separate and complementary article on Ujjāyi.

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Parvatāsana Yoga Vinyāsa Krama



Tālāsana Yoga Vinyāsa Kram



Samasthiti

0



Palms facing up

1



2



3



4



5



6



7



8



9

☸ This pictorial guide only supplements the direct teaching of this sequence taught in a class setting of Self Enquiry Life Fellowship. Before practicing this sequence one must first learn Ujjāyi prāṇāyāma. Please read our separate and complimentary handout on Ujjāyi.

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Tālāsana Yoga Vinyāsa Krama



10



Palms facing up
Thumbs pressing medulla



11



12



13



14



15



16



17



18



19



20



21



Tālāsana Yoga Vinyāsa Krama



0

Samasthiti

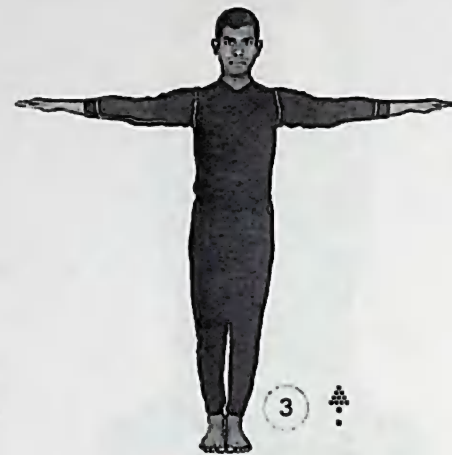


1

Palms facing up



2



3



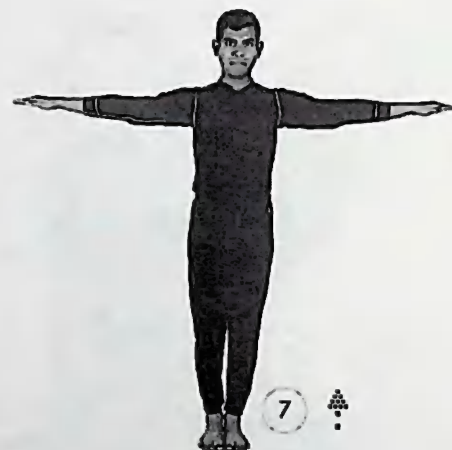
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9

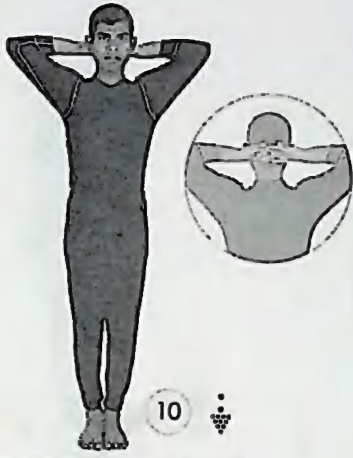
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Tālāsana Yoga Vinyāsa Krama



10

Palms facing up
Thumbs pressing medulla



11



12



13



14



15



16



17



18



19



20



21

Tālāsana Yoga Vinyāsa Krama



22



23



24



25



26



27



28



29



30



31

Tālāsana Yoga Vinyāsa Krama



28



29



30



31



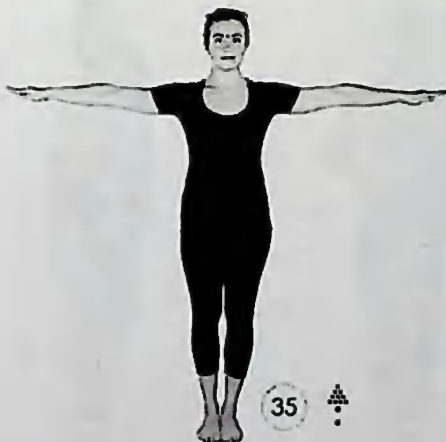
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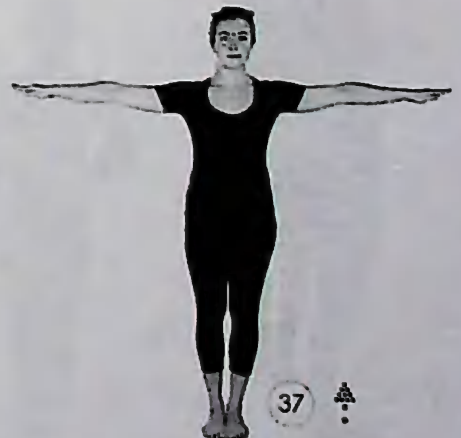
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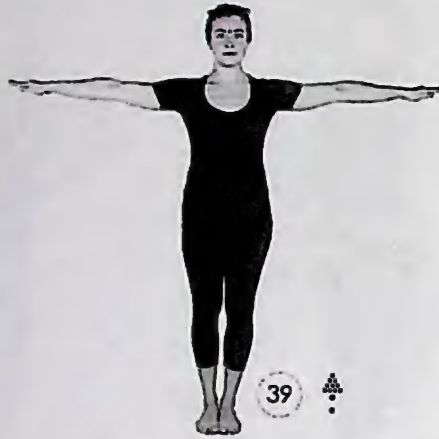


36



37

Tālāsana Yoga Vinyāsa Krama



Twist and look up

Twist and look up



Tālāsana Yoga Vinyāsa Krama



48



Side stretch



49



Twist



50



Side stretch



51



52



53



54



55



56



57



58



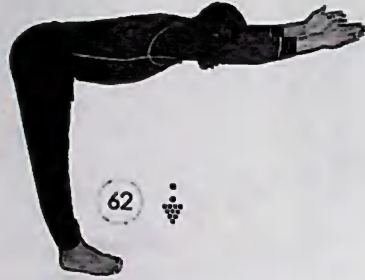
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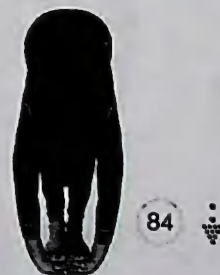
Tālāsana Yoga Vinyāsa Krama



Hands apart



Tālāsana Yoga Vinyāsa Krama



Palms in front of feet

Tālāsana Yoga Vinyāsa Krama



86



87



88



89



90



91



92



93



94



95



96



96

Tālāsana Yoga Vinyāsa Krama



97



98



99



100



101



102



103



104



105



106



107



108



109



Tālāsana Yoga Vinyāsa Krama



Palms on respective
shoulder blades



Tālāsana Yoga Vinyāsa Krama



123 ▲



124 ▼



125 ▲



126 ▼



127 ▲



128 ▼



129 ▲



130 ▼



131 ▲



132 ▼



133 ▲



134 ▼



135 ▲

Tālāsana Yoga Vinyāsa Krama



136



137



138



Palms on respective
shoulder blades



139



140



141



142



143



144



145



Rise on toes
then raise arms



146



147



Rise on toes
while raising arms



148

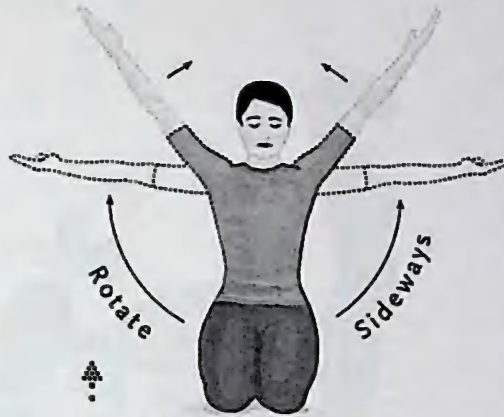


KapālabhātiVinyāsaKrama

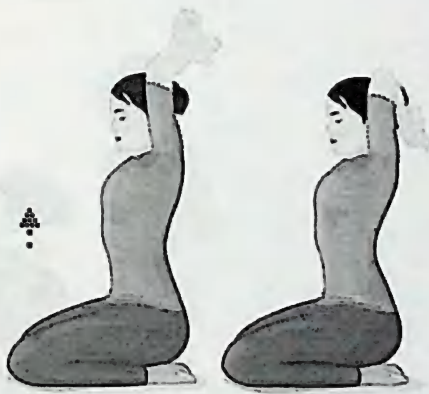
SEQUENCE CAN BE INTEGRATED WITH VAJRĀSANA VINYĀSA KRAMA



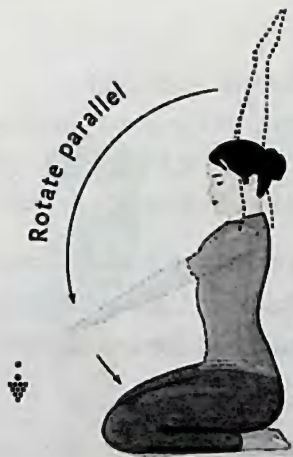
36 breaths



36 breaths



36 breaths



Continue with the rest of
VajrāsanaVinyāsaKrama

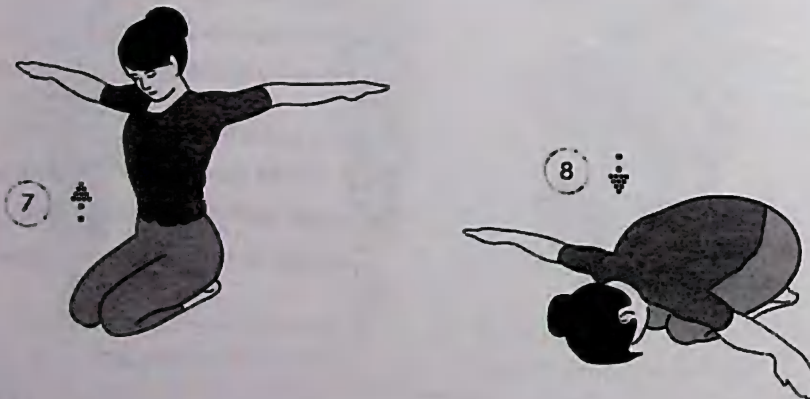
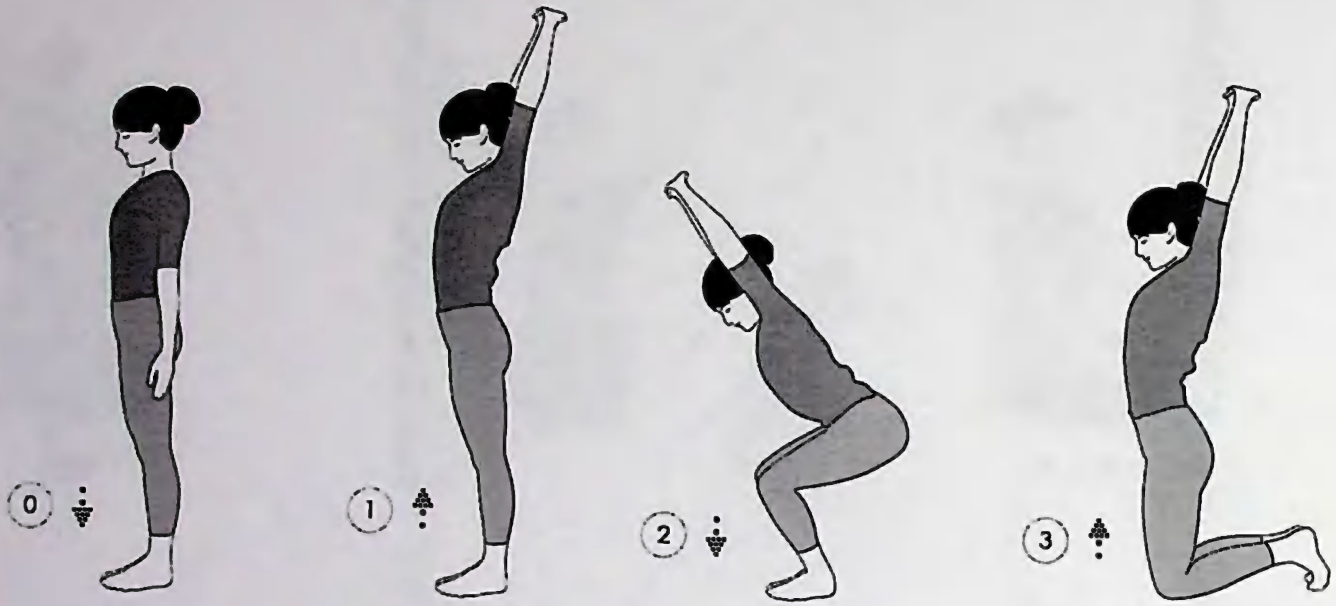
☞ This pictorial guide only supplements the direct teaching of this sequence taught in a class setting by Self Enquiry Life Fellowship.

Before practising this sequence, one must first learn Ujjāyi prāṇāyāma. Please read our separate and complementary article on Ujjāyi.

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Vajrāsana Yoga Vinyāsa Krama

SEQUENCE CAN BE INTEGRATED WITH KAPĀLABHĀTIVINYĀSAKRAMA



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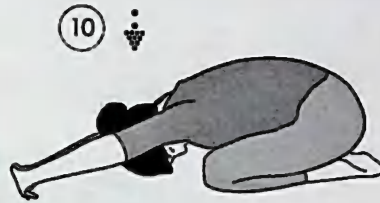
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Vajrāsana Yoga Vinyāsa Krama

SEQUENCE CAN BE INTEGRATED WITH KAPĀLABHĀTIVINYĀSAKRAMA



Life Energy
Balancing Drinkables





Juicing for Quick Energy

ॐ *Ayurvedic approach*

Ayurveda deems juice from a specific ripe fruit as a nectar, especially when it is administered at the right time and if mixed with the correct antidote. In India the tradition of street vendors offering freshly pressed fruit juice with antidotes has thrived for generations. Examples include sugarcane juice with ginger and lime; and orange juice or pomegranate juice with black salt (that contains sulphur). A street side stopover for a refreshing drink of tender coconut water is a much sought after ritual. Similarly, in the Western world juice bars have become increasingly popular.

Basic juicing guidelines from an Ayurvedic perspective begin with preserving the high energy *prāṇic* value and utilizing the enzymes while trying to avoid the sugar spike. There are select fruits agreeable to the three Ayurvedic *dosha* constitutions that can be taken during specific circumstances, especially when taken with the balancing effect of antidotes and for boosting immunity. However, even if the attendant sugar spike is less of a concern, the juicing of fruits and vegetables is not a standard recommendation because of the potential loss of fibres upon extracting the juice. Therefore the Ayurvedic way would be not only to balance the juice based on the *dosha* constitution (body type), but also to create high *prāṇic* balance without losing the beneficial use of the fibres.

ॐ *Choosing an appliance for juicing*

A carton of pre-packed juice bought from a supermarket cannot compare to a freshly pressed juice made at home. One may already own a food blender that is used to make juice 'smoothies'. If one is serious about juicing, it is worthwhile investing in a purpose-built juicing machine instead. They fall into two basic categories: masticating (or cold press) and centrifugal juicers. Centrifugal juicers are the most common electric juicers found in homes around the world. They work by using blades that rotate at high speed (typically around 10,000 revs per minute or RPM, but higher speeds exceed even 30,000). The blades shred fruit and vegetables into tiny particles leaving behind a waste pulp that is usually discharged into an external container or chute.

Masticating juicers and cold press juicers have been growing in popularity. They use a gentle crushing and squeezing action generated by an auger that rotates at moderate speeds of typically 80 RPM. Usually the auger is inside a tube and pieces of fruits and vegetables are pushed into the top of the tube where they are crushed and squeezed. The juice drains out while the pulp is squeezed out at the bottom of the tube. Masticating juicers generating low heat are not strictly cold press juicers, but for all

practical purposes they are synonymous. Though a masticating juicer works slower and takes longer to squeeze juice than a centrifugal juicer, it is easier to clean and this saves time. Cleaning is easier because there is no strainer or mesh as found on a centrifugal juicer. It is also safer to clean because there are no sharp blades.

Ayurveda encourages cultivating a holistic view. What is most important from an Ayurvedic point of view is related to how life force or *prāna* is preserved or reduced. Blades running at very high speeds easily reduce *prāna* and hence the net energy value is lower. Though masticating juicers tend to be more expensive than centrifugal juicers, they are far superior from a nutritional point of view. A variety of nutritional tests revealed that masticating juicers extract up to 42% more vitamin C, up to 60% more vitamin A and give up to 50% higher yield of juice. (Source: Michelson Laboratories, Inc., Korean Food Research Institute and internal laboratories.)

≡ *Advantages of a masticating juicer*

Cold pressing preserves nutrients. The fast-spinning blades of a centrifugal juicer generate heat due to friction. Fruit and vegetables contain nutrients including enzymes that are sensitive to heat. Many of these enzymes work better in mild conditions and become deactivated by the higher temperatures in a centrifugal juicer. A masticating juicer, on the other hand, preserves the *prāna* to a large extent and generates low or no heat thus preserving the nutritional value of the juice. The remaining pulp can be used in baking or cooking with balancing spices; this way the left over fibre can also be utilized.

Less oxidation of nutrients. In a centrifugal juicer, the blades stir up the juice and cause considerable mixing of air into the juice thus speeding up the oxidation of nutrients such as antioxidants and trace minerals. Air can rapidly spoil the juice and therefore juice from a centrifugal model should be drunk immediately as it has a short shelf-life whereas juice from a masticating model generally has a longer shelf-life, even as much as 2–3 days if kept in a refrigerator. Nevertheless, it is still best to consume juice promptly after making or immediately for maximum nutrition and higher *prāna*.

Thicker and more juice. With a masticating juicer, the juice contains more pulp and therefore has a thicker consistency than when using a centrifugal juicer. The juice therefore contains relatively more fibre and protein. Masticating juicers are more efficient at squeezing out the juice than centrifugal juicers. This means one can save on fruit and vegetables or get more juice from a given amount of produce. In a masticating juicer, a greater yield is also obtained from leafy greens such as kale and spinach. In fact, centrifugal juicers are not very good for juicing leafy greens or wheatgrass and the best way to extract the juice is by cold pressing.

≡ *Eating whole fruit or vegetable versus drinking the juice*

A masticating juicer allows the nutrients from a number of fruits or vegetables at a time to be squeezed into a container to make the nutrients readily available. In

this way, indigestible fibre is removed. On the other hand, juice alone cannot act as a substitute for the dietary fibre provided by eating whole fruits or vegetables. Moreover, excessive consumption of juices can cause blood sugar spikes.

From an Ayurvedic perspective, juice is classified as lightening, cooling, clearing and energizing; however, juice can aggravate Vāta and reduce *jatharāgni*, or digestive fire. It is best to understand one's *dosha* constitution (body type) and take a balanced approach when implementing a juicing routine.

Drinking only juice for a limited period of time (juice fast) is well known as a way to cleanse the digestive system of toxins and waste. This is often the basis for some Ayurvedic cures and treatments, but it is recommended to take guidance from an experienced Ayurvedic *vaidya* (a well-trained physician of the Ayurvedic system), as juice fasts may not be appropriate for all body types and can bring about a greater *Vikriti* (deviation from *dosha* constitution at birth).

ॐ General recommendations

Ayurveda teaches that each individual is unique and therefore any recommendation should be based on a personal examination of the individual's needs and *dosha* constitution (body type). However, some general recommendations for what to put into juice and when to drink it are given here.

- Drink juice preferably in the morning; drink it between meals, not with meals. At solar noon around midday, the digestive power (*jatharāgni*) is at its peak; when fasting, juice is often consumed at this time during peak hunger. It is not recommended to consume fruits or juices after 6 pm.
- Drink juice at room temperature; consuming too much cold juice is not ideal.
- Coconut water may be added to juice. Coconut is 'brain' food and the water of the coconut is likened in composition to cerebrospinal fluid!
- Most fruits and dairy products do not mix. For example, banana and sour fruits such as citrus fruits and pineapple should not be combined with milk. Avoid fruit smoothies made with milk. Fruits are better not combined with curd or yogurt; even though it tastes fantastic, mango *lassi* is not a good idea after all!
- Melons should be taken alone or else left alone! When making juice with melons during summer, it is wise to use only melons with added antidotes for balance. Do not mix fruits and vegetables as a general rule. Starchy vegetables such as carrots, beetroots, broccoli and zucchini (courgette) do not combine well with fruit.
- Add fresh ginger to juice as it reduces inflammation, improves digestion and helps boost immunity.
- Moringa (drumstick plant leaves) powder may be added to fresh vegetable juice for an extra boost of nutrients, antioxidants and minerals.



Vegetable Juicing Guide Based on Dosha Constitution

	VĀTA	PITTA	KAPHA
Raw Vegetables	asparagus celery cucumber fennel, <i>root</i> green beans leafy greens, <i>not bitter</i> (lettuce) bottle gourd (<i>loui</i>) spinach, <i>soft leaf variety</i>	aloe leaf asparagus bok choy, <i>small amount</i> broccoli brussel sprouts cabbage, <i>small amount</i> celery cucumber green beans leafy greens, <i>bitter is better</i> (arugula, dandelion) zucchini	asparagus beet greens broccoli, <i>small amount</i> cabbage, <i>small amount</i> celery green beans leafy greens, <i>bitter and astringent</i> (mustard greens, dandelion; chard and kale in <i>small amounts</i>) spinach
Steamed Vegetables	beets carrots	carrots parsnips	beets parsnips
Fresh Herbs	basil cilantro parsley turmeric	cilantro dill mint turmeric, <i>moderate amount</i>	basil cilantro dill parsley sage thyme turmeric
To Increase Digestibility	ginger, <i>fresh</i> lemon	ginger, <i>fresh</i> lime, <i>small amount</i>	ginger, <i>fresh</i> lemon

All vegetables from the brassica family may interrupt thyroid function through goitrogens when taken raw in large quantities. This effect is mitigated by light cooking. Examples of vegetables in the brassica family: kale, broccoli, cabbage, kohlrabi, turnip, bok choy.



Milk Potion

Serves One

Prep time ~ 10 minutes

Cooking time ~ 10 minutes



Ingredients

12 oz of organic non-homogenized whole milk

6 strings of high quality saffron

A flat tsp of freshly grated ginger or a small pinch of dry ginger powder

A tiny pinch of *garam masala*

A tiny pinch of turmeric powder

1 tsp raw sugar crystals or liquid date-jaggery (finely shaved jaggery is okay) or high grade maple syrup

½ tsp high quality granular brownish ghee (clarified and purified butter)

Directions

Grind saffron strings with a mortar and pestle. Slowly bring the milk to boil; add all ingredients, stir gently; let the milk rise a couple of times; it will turn a reddish yellow colour. The milk will somewhat reduce in amount from the gentle boiling. After about 7 - 10 minutes on the heat, turn off. Drink the warm milk, sipping slowly.

Note

This milk potion can be taken either as a rejuvenating drink in the morning or as a soothing drink in the evening. The sweetener is added for mildly sweetening and to boost the ojas; it should not be made into a sweet drink!

Milk should ideally be from indigenous cows, whose milk is rich in A2 casein – especially those with a hump and horn! Zebu cows originating in India are known for the hump, horn and hoof that distinguish them as indigenous cows with milk containing A2 casein and hardly any A1 casein. Raw milk from a reputable dairy with Guernsey cows or older strains of Jersey cows is more desirable, otherwise mildly pasteurized or vat-pasteurized milk is OK. Milk from natural grass-fed cows avoids the risk from genetically modified cattle feed or fodder.

Saffron and turmeric are the best herbs for women's monthly cycle, but should preferably be used in a manner as written above. *Apāna-Vāta* is pacified by this drink and that greatly helps in reducing any reverse menstrual flow. This drink is also extremely helpful for new mothers for post-partum recovery. Authentic Persian saffron is best.

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Life Energy
Balancing Edibles

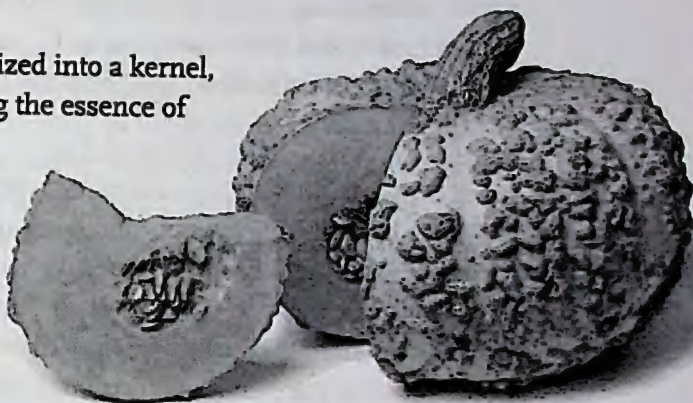




Heirlooms are Looming Large

☞ *Sowing seeds for the future*

If every rice grain is a whole world miniaturized into a kernel, then every seed is a mega-universe capturing the essence of our times from abounding coordinates of space. Every seed represents a complete storyline of our ancient heritage as we strive to preserve them and safeguard an immense continuity. It is by this legacy we make sure that we do not borrow from our future generations. In this way a seed bank is our ultimate security. Our neighbourhoods, nationhood, cultural traditions and richness of heritage depend upon how we welcome our future generations by sharing the choicest selections from what we have deposited as precious wealth. Seeds are what we sow for nurturing the Earth, its soil and the environment. It is the real fruit from our labour of love for the Earth.



☞ *Hybrid is not necessarily better*

The basic types of fruits and vegetables available to buy or grow are those grown from heirloom seeds and those grown from hybrid seeds. Heirlooms, as the name suggests, are passed on from generation to generation and the variety may be hundreds of years old with a rich history. Heirlooms are the product of many generations of careful selection by farmers and gardeners who used their experience to cultivate mindfully taking into account the relationship between the soil, plants and the tiller.

There is no legal definition of heirloom that farmers, gardeners and sellers need to follow. An heirloom is not usually a variety growing in the wild but is a domesticated relative of a wild variety that has been cultivated and preserved over many generations by farmers or gardeners or a local community of growers, for example. Heirloom varieties are favoured by people who prefer to eat local foods because the produce is often bred to suit the conditions of a specific place.

Heirlooms thrive on seed selection from the best plants over generations. This requires connecting with the plants, soil and microclimate, and understanding the

desired characteristics, such as nutritional value, colours and flavours. The selection process relies on open pollination except in the case of fruits trees requiring grafting. Naturally, most heirloom varieties exhibit resistance to local pests.

Some believe that just like the marker of an antique, heirloom plants should be at least 100 years old. Others say their history should go back beyond 1951 when modern plant breeding by hybridization began. Whereas some insist that the heritage predates the beginning of industrialized agriculture, roughly in 1945.

The hybrid varieties are a cross between two or more parent varieties and came into use in the 1950s for large-scale agriculture. To produce a hybrid, two different parent varieties are crossed to produce the first filial generation, or F-1 hybrid. This is a controlled and calculated process of producing desired characteristics in the F-1 hybrid. The crossing of two specific plants means that the second generation may not be "true to type".

Since the 1990s in the USA, a growing number of crops such as soy beans and cotton are made by deliberate genetic modification of the DNA. By definition, heirloom varieties are not genetically modified. Patented genetically modified seeds are a way of economic control and profit-making. Furthermore, many of these seeds are created either as resistant to certain pesticides or to manipulate the plants to produce their own toxins to pests. The result is a disruption among vital species in nature such as honey bees and butterflies, which facilitate open pollination as per the natural cycle. The decline and depletion of other wildlife such as frogs and fish are also of great concern.

Hybrids are usually sold by large seed companies and are produced by a variety of techniques including cross-pollination or grafting. Many types of mass-produced fruits and vegetables sold in supermarkets are of the hybrid type and their uniformity may be the result of strict regulations and standards. For example, in the European Union (EU), a regulation came into effect in 1989 that all Class-1 cucumbers sold should be "practically straight". All the curved varieties of cucumbers were suddenly undesirable in the EU under these regulations and disappeared from the shelves of supermarkets and grocery stores. This particular regulation has since been repealed but the straight cucumber still dominates the European market.

Radiation breeding

Radiation has been widely used to produce mutants. Irradiation to scramble the genetic material in crops has produced mutants of grapefruits that are more red in colour and barley more suited for alcoholic beverages, among other variants. Since its first use nearly nine decades ago in the USA by Lewis J. Stadler at the University of Missouri to zap barley seeds with X-rays, radiation breeding has yielded thousands of mutants, which include varieties of rice, barley, peas, sesame, sorghum and fruits such as bananas and pears. Not to forget that mutant wheat is what is widely used for bread. It is said that about half the rice grown in California now derives from a radiation-bred dwarf variety! Radiation breeding has been widely used by many countries in Asia as well as in Europe.

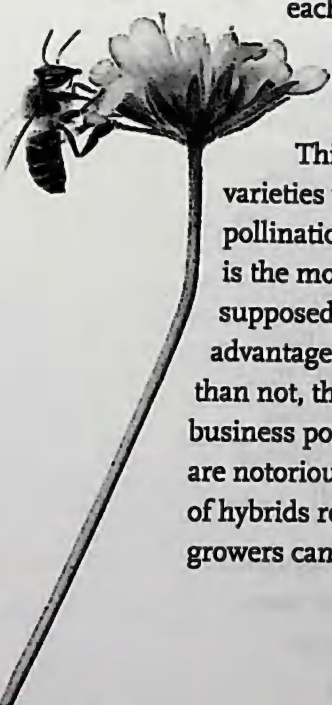
Unlike genetic modification whereby foreign genetic material is introduced into edible plants, radiation breeding has raised fewer eyebrows. The breeding leaves no known residual radiation while forcing a genetic diversity much like that which drives natural evolution. Although there are said to be no known residual markers of intervention, the process creates an offspring that is borne out of obvious mutative intervention. This introduces additional genetic diversity, which might be out of step with the natural order of an otherwise co-evolutionary process of natural selection, especially between the produce and its consumer – the human. One could argue that this radiation breeding process has sped up developments and does not allow co-evolution to take its natural course.

Many environmentalists point out that the current pace of change impacting the food chain indicates we are out of step with nature and accelerating too fast. It is argued that climate change, the world food crisis and declining public health are largely due to human intervention or unnecessary tinkering in the name of innovation. It is often pointed out that the natural order can be better understood through the existing knowledge base and careful nurturing. At the same time, supporting global food needs can be achieved by honouring nature and its harmonizing harvest cycles – so there is no fear of shortage if we use natural resources wisely!

✧ *Open pollination*

Open pollination is the process whereby bees, butterflies and wind help pollinate flowers along with other natural pollinators. Open pollination is sometimes used as one of the criteria for defining heirloom varieties. However, just because a plant has been open-pollinated does not mean that it is an heirloom as there are other criteria. Generally, growers of heirlooms may prefer the pollination process to take place in isolated areas. Varieties of squash and pumpkins, for example, can cross-pollinate each other naturally if grown together and the original variety could become lost or diluted genetically. Members of the brassica family such as cabbages, cauliflowers and turnips also tend to cross-pollinate readily.

This demonstrates the difficulties of keeping intact the original heirloom varieties with their unique characteristics. With heirloom varieties, natural cross-pollination is sometimes to be avoided. With hybrids, deliberate cross-pollination is the most common process for creating new varieties where the aim is to supposedly get the best of both worlds from two (or more) varieties. Despite the advantages from the cross-breeding of plants, there are disadvantages. More often than not, the characteristics plant breeders wish to develop are only desirable from a business point-of-view of mass production. But the big disadvantage is that the seeds are notoriously unreliable for “true to type” reproduction. This is what makes growers of hybrids reliant on buying a new batch of seed each season whereas heirloom growers can collect their seeds for the future.



Advantages of heirloom varieties

Saving the seeds. It is clear from the growing awakening about heirlooms that seeds ought to be preserved and treasured. One big advantage is that growers can collect the seeds from heirloom varieties and grow them again year after year to obtain a plant that is true to type. In this way, growers can become self-sufficient with their seeds. In contrast, the seeds collected from hybrids provide no guarantee that they will be true to type. If one saves the seed grown from hybrid parents, the offspring might show a lot of variation and be inferior to the parents.



More flavour. Appearance isn't everything! Hybrid plants are often selected for their appearance and shelf-life. They may also be chosen because they produce fruit that ripens at the same time or are more resistant to pests and diseases. For example, a tomato may be bred to be picked green and gas-ripened. That's the way some modern tomatoes are grown and ripened for ease of shipping. These are advantages for the grower but what about for consumers? Often hybrids are not selected for their taste or nutrition. In contrast, heirloom varieties tend to taste better or have a unique taste. By preserving these varieties, we not only keep alive a rich heritage, but better understand the relationship between taste, nutrition and satiation from eating. A typical feedback from those who eat and thrive on heirlooms is about higher life-force (*prāṇa*). It is this feeling of higher inherent energy in them and the satisfaction they bring when part of a regular diet which makes the proponents of heirlooms vouch in favour of the more natural order of selection.

Higher nutrition. In the pursuit of higher yields for hybrids grown by industrial farming, the downside seems to be lower nutritional value. Old-fashioned open-pollinated field maize, including the type grown for milling into flour or for feed, are found to contain up to twice as much protein than the new hybrids. Some open-pollinated varieties are known to contain higher levels of iron and manganese. In this case, it is obvious that not only quality and taste, but nutritional value is a victim of this crop engineering trend. Donald R. Davis, a former biochemist from the University of Texas, has done a review of the research in this field. In one study he cites, 45 maize varieties developed from 1920 to 2001 were grown side by side and it was found that the concentrations of protein, oil and three amino acids have declined in the newer varieties. Davis attributes this decline partly to the plant breeders who have developed high-yielding varieties without concentrating on broad nutrient content as well.

Suited to local conditions. Heirloom varieties may belong to a particular geographical area and over time may have evolved to match the growing conditions in that area. This can give them some unique properties well worth preserving. For example, though maize is a staple part of the diet in Central America, there are many

thousands of different local heirloom maize varieties adding variety to the diet and representing a valuable genetic resource. If a variety has been carefully nurtured by replanting the seeds through generations within the microclimate of a small geographical area, then it stands to reason that this particular produce suits the food and nutritional needs of the inhabitants in that particular area. Moreover, such seeds will then harmonize and safeguard the evolutionary pace between the planter and the eater in synchrony with the local environmental conditions. Co-evolution will be synergized and food will not be tampered with to evolve faster than the human being!

Biological diversity means more choice. Farmers and growers are relinquishing more and more control of their seeds to seed companies. Then the seed company decides which varieties are available to grow and the choice becomes narrower. Heirloom varieties empower farmers and growers to choose the seeds they deem to be best. For example, if one mango tree or tomato plant gives particularly juicy fruit and is unusually hardy, the strain can be selected for future use. Taking care to choose varieties in one area according to the environmental conditions allows for select varieties that are more robust and productive. Careful selection tends to improve the strain of the crop grown yielding a better performance suited to each varying microclimate. Biodiversity is important. Supposing a pest or disease attacks potatoes with disastrous consequences, if there are a multitude of local heirloom potato varieties to choose from, there will be a greater chance of at least one surviving the attack by showing resistance. Crops are becoming more and more homogenous around the world. Many of the bananas we eat are of one single variety, the Cavendish, which is currently under serious threat by a new strain of Panama disease. If we maintain diversity, our crops and our food supply will not be so vulnerable.

Safeguarding the legacy for the future

It seems natural to take a seed from a plant, keep it over the winter, place it in the soil in springtime and watch a new plant grow of the same variety. Mankind has done this for thousands of years. However, with the introduction of hybrids, we are moving away from this time-trusted cycle of seed saving. Heirloom varieties that have thrived in a particular region for centuries are fading away and being replaced with new hybrid varieties. Fortunately there are farmers and seed banks that are preserving heirloom varieties and ensuring that the future of biodiversity is safeguarded. When we cultivate and support heirlooms, we are not only preserving the lineage that links us to our past generations but we do not borrow from our future generations. Ultimately it is about the quality of life and fulfilment for those who thrive on using the heirlooms. Let us safeguard this legacy.



Soupy Legumes

❧ *Heart of an Ayurvedic meal*

As a vegetarian, one of the prime sources of proteins and other nutrients is legumes. In countries like India where there are large numbers of vegetarians, legumes have always been an important part of the Ayurvedic diet. The everyday main meal is usually based around a soup with legumes as the main ingredient. The soup dishes are named after the bean or lentil and are served as the main course.

There is a prevailing deep relationship with bean or lentil soup because these legumes are deemed as an ancient crop linked with antiquity. Savouring a hearty soup has been hailed as a tasty way to imbibe the high protein content of these legumes. Vegetarians are often taught that the proteins from beans and lentils are the best for muscles. Besides milk and the various dairy products made from the milk of indigenous cows, legume protein is considered the best alternative to all other forms of animal protein. Practitioners of various schools of martial arts, hatha-yoga, *yoga-vinyāsa* traditions as well as ardent meditators rely heavily on legumes to maintain their flexible musculature.

The delectable flavour and art of cooking these legumes into sumptuous soups have earned a broad-based culinary appreciation in various parts of the world, especially in the Mediterranean and Persian diet. It is believed in India that the tradition of growing grains and legumes has thrived since agriculture came to be rooted in India some 15,000 years ago in the present cycle of inhabitation dating back to Vedic antiquity (archeo-genetic research data supports this notion!). Alongside animal husbandry, lentils have had a worldwide history of hand-husbandry, meaning that hearty soups for meals have a complete chain of caring hands at every stage from tilling, sowing, harvesting, threshing, cooking and relishing in the after-effects of a satiating meal. Like another major dry-land crop – millets, lentils are dry-farmed and mostly rain-fed, not needing irrigation. In parts of India, lentils are planted typically after the rice harvest and are known to survive wintry conditions prevalent when the crop is usually grown.



What's in a legume?

Legumes include a wide variety of beans, lentils and peas. The words legume, bean, lentil and pea can be used to refer to either the plant itself or the fruit it produces in the form of seeds. Edible legumes are also known as pulses. However 'pulses' can have a narrower definition meaning crops harvested for their dry seeds and this would exclude green beans and green peas, for example.

In biological terms, legumes can be defined as belonging to the *Leguminosae* or *Fabaceae* family consisting of over 10,000 species; some sources claim up to 18,000 species. Only about 200 are known to be cultivated and a much smaller number of pulses are readily available on the market for consumption. Lentils form a subcategory within the legume family known as *Lens culinaris*. Herein *Lens* is a Latin word which describes the shape of the seed of a cultivated legume. This name from the late 18th century is attributed to Medikus, a German botanist and physician.

A defining feature of the *Leguminosae* or *Fabaceae* family is that the seed is often inside a pod that has two halves with a seam down the middle. The pod is usually soft but in the case of the peanut, which is also classified as a legume, it grows hard and has to be broken open. Each legume is slightly different in the way the pod grows and what it contains. Sometimes the pod is edible as in the case of sugar snap peas which can be eaten whole, pod and all. There is a distinction between legumes like these that are picked when they are still green and those that are picked later when they are mature. Normally as the pod of a bean, pea or lentil reaches maturity, it turns yellow or brown and dries up. Meanwhile the beans, peas and lentils inside also dry up and turn from green to their final colouring.



Pre-soaking the pulses

Because the seeds are dry, soaking overnight is usually necessary before cooking except in the case of certain pulses where soaking in boiling water for 10–20 minutes is sufficient. Bigger beans including the popular kidney beans and lima beans can be soaked overnight. Oftentimes, dried green or black whole chickpeas (*chana*) may be soaked overnight. If and when proper pressure cooking appliances are available, pre-soaking is unnecessary. Not only does soaking soften up the seeds but it can also relieve somewhat the cause of flatulence. The gaseous content stored for future germination is released upon soaking with hot water. However, two complex sugars, namely, raffinose and stachyose are very difficult to digest! The same sugars are found in grains such as wheat and rye, some members of the brassica family and certain root vegetables.

These indigestible sugars are fed upon and fermented by the gut bacteria. The fermentation releases gases. Along with mostly non-odorous hydrogen and carbon dioxide, a small pungent percentage that includes hydrogen sulphide is enough to embarrass and deter many from embracing a vegetarian diet, which relies largely on commonly cooked pulses! Of course the amounts of these sugars vary among plants

within the same species. Similarly, the susceptibility to flatulence from cooked beans and lentils also varies among individuals.

The sea vegetable kombu has an extraordinary ability to render pulses more digestible and less gas-producing because it contains enzymes that help break down the raffinose sugars. Once these sugars are broken down, more of the nutrients are absorbable and less gas is produced thereby making the eating of legumes a more enjoyable experience. Typically a few inch-long strips of dried kombu can be used in cooking these soups. One strip per soup is enough.

॥ *Balancing with spice blends*

The experience of flatulence is largely reduced and overcome by the use of complementary spice blends, especially those from the *Apiaceae* family of plants as well as other well known Ayurvedic carminative seeds such as *kalonji* (nigella) and *ajwain* (carom). In Ayurveda, bean and lentil soups are often made according to the soli-lunar diet that synergizes the absorption of pulses in harmony with the energies of planets and luminaries they imbibe (see table at the end of this article). Secondly, the beans or lentils are taken in accordance with one's basic *dosha* constitution (or body type) for increased digestion. The third primary guidance consists of balancing spices and special ingredients, which are mixed while cooking the soups so that all six tastes, namely, sweet, sour, salty, bitter, astringent and pungent, are all balanced.



The art of soup excellence then depends upon bean and lentil selection for the particular day and then balancing it for *dosha* constitution, and thereafter overcoming any shortcomings via spice blends and other special ingredients. Adding up to a cup of real buttermilk at the end rounds off the soup, gives it body and makes it colon friendly! Garnishing with copious amounts of fresh green herbs, especially cilantro, balances the *agni* and makes the food suitable for those who have dominant Pitta *dosha*. Moreover, cilantro has excellent blood cleansing properties. Similarly, curry leaves are added as blood thinners. Date jaggery is used as an iron supplement and to balance the sweet taste. Furthermore, fenugreek seeds or neem flowers are used to balance the bitter taste. Mustard seeds or mustard oil add to the pungent taste. Verily, turmeric adds to the astringent taste. Minerals are boosted by the use of high quality natural salts.

The art of balancing the six tastes while making the soup *tri-doshic* (acceptable to all three principal Ayurvedic *dosha* constitutions), digestible without flatulence using spices and special ingredients, and matched to the planetary energies is at the height of culinary accomplishment. When the flame is turned off at the end of cooking, and the heavier portion (including any other added vegetables) settles to the bottom leaving watery layers on top, then Ayurvedic soup-making is yet to be mastered! The whole soup needs to be uniform and balanced, delectable to the taste and surely satiating to hunger. One balanced soup meal that is low in sweet, sour and salty tastes and yet delicious is deemed enough to satisfy the palette for the day. Such is the benefit of an Ayurvedic balanced soup.

In order to make sure that the soup does not settle after cooking leaving watery layers on top, the correct relationship between cooking time and the tempering phase needs to be learnt from repeated practice. Water content varies based on pre-soaking versus pressure cooking the pulses. Such adjustments can be learnt from experimenting. Usually the rounded shapes of the pulses are not maintained and soups tend to become uniform. This is good for digestibility! If low flame or low heat is used throughout cooking, the soup will be nutritious. The aim is to preserve as much of the nascent taste of the pulses as possible. For this reason, a measured amount of water is used at the beginning and it is not advisable to keep on adding water during cooking. If water has to be added later, it should be added the minimal number of times possible. There is no fast and high heat cooking of legumes (unless pressure cooking is used); otherwise the protein quality might be compromised. Once the process is understood, it is difficult to mess up!

≡ Nutritional value

Another defining feature of legumes is that almost all of the members of the *Leguminosae* family are capable of fixing atmospheric nitrogen through the action of bacteria in their root system. Nitrogen acts as a fertilizer and is a constituent of protein. This explains why legumes are one of the best providers of protein in the plant kingdom. Legumes are also grown as forage for animals or ploughed back into the soil to increase the nitrogen as part of crop rotation with non-leguminous plants. These are known as 'forage legumes'. Legumes fall into various categories including 'grain legumes' which are cultivated for their seeds and used for human consumption. They may also be used for the production of oils as is the case for soybeans, for example.

It should be noted that grain legumes are not the same as cereal grains. In fact, the protein composition of legumes and cereal grains complement each other very well in terms of providing a complete range of proteins or amino acids for a healthy diet. Indeed, this combination has formed the basis for popular vegetarian dishes around the world. For example, the Central Americans eat beans with corn tortillas or tacos, the Middle Eastern nations serve hummus (garbanzo spread) with pita bread while the lovers of Ayurveda serve bean or lentil soup with rice and various types of flat breads (such as those made with millet flour). Barley and lentils together make a very satisfying combination. However, bean or lentil soup is best combined with heirloom rice or heirloom millet especially if adhering to a gluten-free regimen.

Legumes provide a good source of protein, fibre and folate — all necessary for a healthy diet. Folate is especially important to pregnant women. According to the United States Department of Health from investigations of the requirements of adult women, three cups of legumes a week contain:

- 24% of the recommended weekly requirement of folate
- 15% of the recommended weekly requirement of protein
- 20% of the recommended weekly requirement of fibre

In addition to the above, legumes are a good source of phosphorus and magnesium among other minerals. However, these are general figures and though most legumes have significant amounts of protein, fibre and iron, the amounts vary from one type to another.

⇒ *Summary of the nutritional benefits of legumes*

- High protein content. A non-animal source of digestible protein
- Good source of dietary fibre
- Low in fat
- About half a cupful provides about a quarter of folate requirements for women
- A good source of phosphorus, potassium, iron, zinc, calcium and selenium
- Vitamins include thiamin (B₁), riboflavin (B₂), niacin (B₃), B₅ and B₆
- Rich in antioxidants

⇒ *Coloured beans and their qualities*

Below is a short summary of nutritional qualities listing some of the more commonly consumed beans.

- **Black-eyed peas** – these beans contain more calcium than any other bean; good source of folate and magnesium. Split black-eyed peas are commonly known as the *chora* lentil often used in making creamy soups.
- **Kidney beans** – high fibre source and a rich antioxidant bean that is cooked as a popular Ayurvedic dish called *rajma*.
- **Red beans** – an excellent source of iron and a top antioxidant bean containing more antioxidants than blueberries when compared by weight.
- **Black beans** – in addition to ranking among the best source of antioxidants among beans, black beans are a high source of magnesium and iron.
- **Pinto beans** – a high source of selenium among beans, they are also known for higher antioxidant power than the blueberry.
- **Green gram** – small olive-green beans (*mung*) available whole or split. Good source of iron, thiamin, riboflavin and folate with some potassium and calcium.
- **Red gram** – small round brownish cream beans popularly known as pigeon peas (*toor* or *tuvar*) available whole or split. Rich in iron and potassium with some calcium.
- **Black Bengal gram** – these beans look similar in shape and size to whole green gram but are black (*urad*). They are available as whole and split. When the outer

layers are husked, they are creamy-white in colour. They have markedly higher fibre content in comparison to chickpeas.

- **Chickpeas** – the most well-known chickpea (*chana*) is the whitish garbanzo bean which is round, rough on the outside and pointed at one end. They are available both as whole and split. Good source of protein, iron, folate, phosphorus and dietary fibre.

✧ Matching legumes with planetary energies

In the following table, the ruling *graha* (planetary or luminary body) of the day of the week is matched with energies prevalent in certain legumes and grains. As per the Ayurvedic soli-lunar diet, legumes and grains imbibe and ingrain planetary or luminary energies and therefore are best absorbed in the human digestive system on pertinent days of the week.

The following simple chart shows how different legumes and grains relate to the planetary and luminary energies within our solar system based on the day of the week. Of course, a more comprehensive chart would include many more food items and diverse relationships. As an example, all *mung* beans are best absorbed on Wednesdays because they have the Mercurial energy; however, *mung* beans can also be used on Fridays and Saturdays because both Venus and Saturn have friendly relationships with Mercury! Wheat and barley are more relevant to Sundays, but are omitted herein due to gluten sensitivities and the lack of easily available heirloom strains. Millet has the highest *agni* whereas rice represents the highest *soma*. They are also preferable on a certain day as shown in the simple daily diet depicted in the following table.

Day of the week	Graha (planet or luminary)	Legume or grain
Sunday	Sun	Millet
Monday	Moon	Rice
Tuesday	Mars Ketu (southern node)	Pigeon peas (<i>toor</i> or <i>tuvar</i>) for Mars; Horse gram (<i>kulthi</i>) for Ketu
Wednesday	Mercury	Green gram (<i>mung</i>)
Thursday	Jupiter	Chickpeas (<i>chana</i>) or garbanzo; Green and yellow peas
Friday	Venus	Cow peas (<i>val</i>); Lima beans (<i>ranguni val</i>); Black-eyed peas
Saturday	Saturn Rahu (northern node)	Black Bengal gram (<i>urad</i>); Kidney beans; Black beans



Wholesome Use of Grains

❧ *Can grain drain the brain?*

The risk of gluten sensitivity and other complications from engineered grains pose a serious issue with the use of grains. Much is being said about the relationship between grains and neurological disorders. The results of studies on gluten sensitivities are compelling. A gluten-free diet has become a necessity. Engineered wheat is falling out of favour. Compared to heirloom varieties of einkorn wheat and emmer wheat, the additional glue and chromosomal aberrations have made the commercially available hybrid wheat provoke a massive health crisis. Interest has surged in the whole paradigm of co-evolution based on heirloom selection in harmony with microclimates. It is obvious that our genetic evolution is not able to keep up with the re-engineering speed of these foods laced with gluten like the commercial wheat. Ayurvedic nutritionists are valuing the heirloom strains and looking closer into the ancient wisdom of using millets to balance a meal which has the legume soup as the centrepiece. This is also because, once gluten sensitivity has been triggered, even low-gluten grains are being found to trigger this intolerance.

The intestines are unable to cope with gluten, causing an immune response and inflammation, which travels through the blood to other parts of the body. The brain is especially vulnerable. From Ayurvedic and Yoga philosophy points of view, a leaky gut implies also that the blood-brain barrier has been compromised. The small intestine and the brain are correlated in yoga practices as being similar and related evolutes. The small intestine are able to spread and float easily while the brain is restrained! The *agni* is seated in the small intestine and by various yoga and breathing techniques, this energy is transferred to the brain for more power and higher functional associative memory (*smriti*). This forms the core of the practices that raise the *samāna-prāna* from the solar plexus region to the brain via the *sushumnā-nādi* of the spinal cord using breath-hold techniques such as *vāyu-bhaxana*. The purpose of the well-known breath-hold practice of *agnisāra-dhauti* is to fine-tune the function of the *jatharāgni* or the digestive fire related to the small intestine.

Once gluten sensitivity and the attendant inflammation (excess of positive ions) have crossed a threshold, which varies from person to person, cognitive degradation and the onset of dementia can be triggered. Neurological case studies are now verifying the Ayurvedic wisdom warning about such excesses. Even though a direct causal relationship between memory loss and gluten is yet to be fully established,

the correlation between memory recovery and abstinence from grains is enough to make us re-examine our dietary patterns. The crucial question is whether the gluten-free grains of today also provoke dementia, and this remains a question for further investigation.

However, Ayurveda is clear in its approach. Ayurveda deems the small intestine as the seat of *agni* and attaches great importance to the digestive fire *jatharāgni*. Ayurveda supports an alkaline diet and looks carefully into the post-digestive effect (*vipāka*) of edibles because it seeks to contain inflammation. Ayurveda has had a long history of delineating how the immune response (which brings about inflammation) can affect the brain. It recognizes inflammation (excess positive ions or *agni tattwa*) as the start of degenerative processes, and hence strongly recommends balancing the diet with *soma*-rich alkaline foods. If the small intestine as the seat of *agni* (fire principle) are properly maintained, the fogging of the brain can be avoided; such is the clarity of Ayurveda!

ॐ *Balancing blood sugar levels*

Check the carbs! We keep hearing about carbohydrates that readily break down into sugar and affect insulin sensitivity. We need to better understand the Ayurvedic emphasis on plant-based starch when addressing the concerns about sugar derived from carbohydrates. All starches are carbohydrates whereas not all carbohydrates are starches. Carbohydrates are usually classified into sugar, starch and cellulose, based on how many sugar molecules (saccharides) are bonded together. Starch is a polysaccharide typically comprised of a few hundred to a thousand glucose molecules. In contrast, simple sugars are monosaccharides or disaccharides. For example, honey belongs to the sugar group but is not a starch. As per this classification, milk also belongs to the sugar group (due to its lactose content). Most fruits belong to this sugar category of carbohydrates. The third category, cellulose, contains a chain of well over 1,000 glucose units and is the main source of indigestible carbohydrates in our diet. Ayurveda recommends plant-based cellulose as the primary source of high quality fibre for our regular diet. The soluble fibre is meant to assist the fermentation of our food. The insoluble part is meant to increase the bulk of the stool, maintain consistency and thus assist in continence. Yes, fibre plays an important role in balancing our gut feelings! Fibre helps reduce inflammation.

Ayurvedic plant-based meal planning has another dimension which is connected with the blood sugar levels and insulin sensitivity. Let us consider the fact that wheat, maize, millet, rice and legumes (pulses) are full of starch. Both grains and legumes form an essential component of an Ayurvedic meal plan. In general, vegetables are low in starch. They are eaten fresh or lightly cooked to retain their vitamins and minerals in a high *prāṇic* state. The starch is broken down into glucose units by enzymes at a slower rate maintaining the bacteria in a balanced state during the digestive and post-digestive process. Ayurvedic meal planning prefers the starchy grains and legumes but also takes into account their fats and proteins. Starchy food has a low fat content but fats are typically supplemented by small amounts of ghee

and coconut oil. The protein content of starchy food is also supplemented by the use of legumes. The fat and protein become somewhat balanced when grains and legumes are combined.

The glycemic index (GI) is a scale that ranks carbohydrates by how much they raise blood sugar levels. This index is based on the characteristics of the carbohydrates and how fast they can be broken down. GI is widely used as an indicator for comparing different types of food but it can be somewhat misleading because it is not based on the actual size of a serving. That's why glycemic load (GL) is a more useful indicator. Thus, a watermelon has a high GI but a low GL. The GI is based on consuming five cups of watermelon whereas the GL is based on a typical serving of one cup. Watermelon consists of large quantities of water, as the name suggests, and therefore consuming a cupful of watermelon will not dramatically boost blood sugar levels. Basing a diet largely on counting the GI or GL is a rather restrictive way to make food choices, but if one does so, the difference between GI and GL needs to be taken into account along with *prāṇic* value.

Wheat scores high on the GI scale. Whether whole-wheat bread or white bread made from refined wheat flour, these types of bread are well known to produce a surge in blood glucose. The composition of the starch consumed is a vital factor in the impact that food has on blood sugar levels. Some components of starch such as amylose are slow to be digested into sugars and this is advantageous because it reduces the risk of spikes in blood sugar levels. Most starchy foods also contain cellulose. This increased fibre allows for a lower glycemic load and thus the blood sugar level is raised relatively slowly. Millets have a low glycemic load compared to most other grains but even the popular gluten-free replacement grains such as quinoa and amaranth have some glycemic load.

If blood sugar levels are raised quickly, the pancreas compensates with higher levels of insulin to reduce blood sugar. It also ushers in higher levels of triglycerides. Rapidly increasing or frequently high levels of insulin make the cells less receptive to insulin leading to the classical symptoms of insulin resistance. Obviously, this can lead to the onset of diabetes or obesity. Nevertheless, grains remain an essential part of our diets as they have been in the past.

Ayurveda considers estrogen to be the hormone of abundance and insulin to be the hormone of longevity. Ayurveda does not stop with high quality raw ingredients; it lays down the foundation for mixing and balancing these ingredients from nature into a healthy regular diet. While insulin resistance might be linked with memory loss and dementia, Ayurveda focuses on a diet that is designed for sharper memory and tries to balance the body constitution based on a deeper understanding of what is the immune response and the resultant inflammation. It is possible to control the blood sugar by way of Ayurvedic dietary choices. Whether most grains should be omitted due to modification, especially by stripping off the fibre, remains to be seen. Engineered starchy food, such as grains devoid of fibre, is rapidly converted into glucose when consumed, promptly raising the blood sugar level. Another post-digestive complication is that extra gluten in modern wheat can lead to severe

gluten intolerance. Once the body has become sensitized to gluten, it might be difficult to reverse the effects of gluten sensitivity. Despite containing natural gluten, unmodified heirloom strains of wheat (such as einkorn) may not induce gluten intolerance and can be embraced due to other beneficial qualities of wheat.

☞ Carbs are here to stay

Ayurveda recommends eating plant-based starch rich in fibre (and cellulose) in meals that also contain proteins and fats. Grains and legumes supplemented by seasonal vegetables with high *prāna*, cooked on a low heat to retain colour, provide the micronutrients and supply the necessary calorific energy. Ayurveda shows how grains combined with legumes meet the majority of our energy needs. Ayurvedic combinations of steamed fermented foods are designed to honour the communication between intestinal flora and the brain, and hence the gut microbes are nurtured to maintain friendly gut bacteria.

The Ayurvedic *dosha* composition of *sapta-dhātu* (the seven root vital tissues) constituting the physical body is as follows:

1. chyle (*rasa*) – lymphatic fluid that boosts immunity and cleanses blood
2. blood (*rakta*) – nourishes muscle and flesh, maintains the complexion, distributes nutrition
3. muscle (*māṃsa*) – braces the skeletal structure, nourishes fatty tissues, facilitates movement
4. fat (*meda*) – adipose tissue that greases the limbs and eyes, stabilizes by nourishing bones
5. bone (*asthi*) – maintains sturdiness of bodily structure and stature, nourishes the marrow
6. marrow (*majjā*) – strengthens the bones, nourishes the seminal fluid
7. seminal fluid (*shukra/artava*) – assimilates *prānic* energy and gives the capacity to procreate

Herein five out of the seven constituents are Kapha dominant. Blood is Pitta dominant whereas bone is Vāta dominant; the rest of the vital tissues are known to be Kapha dominant. Based on this analysis, over 70% of all vital tissues are deemed *kaphaja* or dominated by Kapha *dosha*. Furthermore, the total water content of the body is about the same percentage. These figures show why *madhura-varga* food (capable of providing energy by breaking down into sugar) made up of grains and carbohydrates that help sustain the Kapha constituency have been part of the vegetarian diet and are here to stay. Obviously, high fibre complex carbs are preferable.



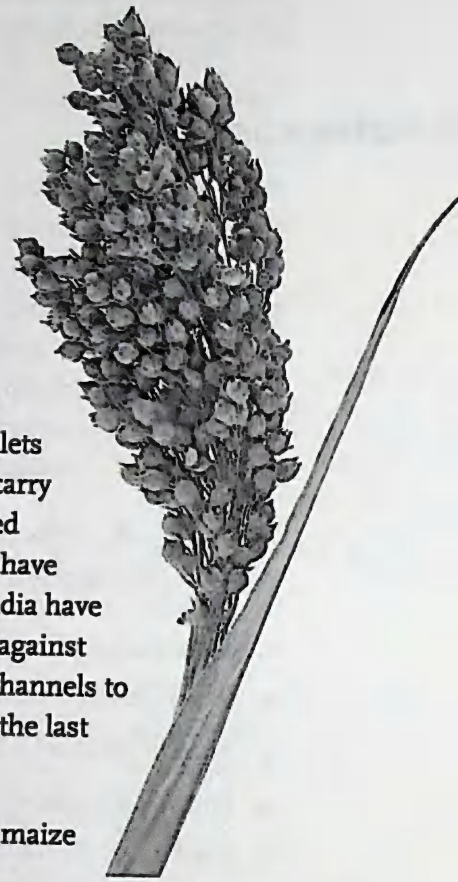
Million-fold Value of Millet

≡ *Unearthing an ancient treasure*

One seed is said to yield a million seeds! One of mankind's most ancient grains is making its way back from the lost treasures. Millets do not have the polished look of rice and even better they do not carry the gluten baggage of wheat. While urban ailments have increased dramatically due to overdependence on engineered food, millets have remained the common man's food. Down-to-earth villagers in India have largely retained their wisdom about ancient food traditions even against the onslaught of the green revolution which allowed the official channels to push rice and wheat through the public distribution system over the last six decades.

Millets are an ancient group of grains, separate from wheat, rice, maize and barley. With the resurgence of millets, it is now believed that millets were a staple food in the Indian subcontinent, Southeast Asia and China and of course in Africa. Like in India, millets were deemed to be sacred in China. Through the overland trading routes linking Asia and Africa to the Middle East and Europe and through the maritime routes, millets became popular all over the world as the choice grain. The Maya, Inca and Aztec civilizations are known to have thrived on this wonder grain.

Millets have been part of the human food chain since prehistoric times and in India it is a gift from the legacy of Vedic antiquity dating back to the onset of early agriculture. Experts point out that the foxtail millet plant is so ancient that no wild strain is perhaps available today. The chosen grain status during the classical period of India is further verified by the legendary Sanskrit poet, Kālidasa's masterpiece called *Shakuntala*, wherein foxtail millet was offered. The *Shatapatha Brāhmana* of the Vedic Sanskrit literature provides references to the ancient popularity of millets. Major archaeological sites such as Harrappa and Mahenjodaro of the Indus-Saraswati river civilization have yielded clues to many a type of millet. Millet was also included in the treasured collection of plants in the hanging gardens of Babylon. The mummified Egyptian lineages are known to have used millets as an afterlife offering. The ancient millet culture of Ethiopia and Uganda is considered to have migrated northward. Millets were favoured because the plants grew better in dry and arid conditions where wheat and barley were unable to thrive.



Morphological and genomic data have identified the select types of millets. Even the agro-biodiversity of minor millets has been investigated. However, studies reveal that there could be several thousand varieties of millet of various colours spanning from red, yellow to white. Millet plants represent an agronomic group that collectively refers to a number of annual small-seeded grass species, which grow in a similar way to maize ranging from one to over 12 feet in height. Their diverse radiant colours are primarily attributed to their hull depending on their variety. Once the millet seed is hulled, it can be digested easily. Hulling does not reduce the nutrient value as the germ stays intact. Like most legumes and pulses, millets can easily be dry-farmed as a rain-fed crop. Some varieties such as the red-coloured finger millet (*rāgi*) or foxtail millet (*tinnai*) have shallow roots and therefore respond well to irrigation or rainfall. Many types of millet plants are especially adaptive to a variety of soil conditions, whether sandy, acidic or alkaline. Millets are proven to survive dry weather patterns with minimal rainfall and thrive in semi-arid conditions where other grain crops are not sustainable. Moreover, harvested small millets (excluding sorghum and pearl millet) can be stored for a few years if proper methods are implemented. Millets do not need any fumigant for large-scale storage and are hardier in this respect than more delicate produce such as some of the pulses from legumes. Even though field pests and diseases remain a concern, millets require substantially less energy to grow in comparison to other grain crops.

❧ Nutritionally outstanding

Among readily available varieties that are used in Ayurvedic meal preparation, foxtail millet (*tinnai*), finger millet (*rāgi*), barnyard millet, little millet (*moraiyo* or *samai*) and kodo millet (*kodri* or *varagu*) are known as small millets; proso millet (broom corn) is of medium size and yellow when hulled; whereas pearl millet (*bajra*) and sorghum (*jowar*) are generally known as larger millets based on their grain size. More than six varieties each of foxtail millets and finger millets are currently part of the regular diet in southern India. Some of the varieties of finger millet look similar in shape and colour to the smaller teff super-grain of Ethiopia.

Amaranth (*rajgira*) is often used as a cooked grain in porridges or snacks alongside these small millets. Quinoa is grown in the middle Himalayas and is favoured for its high nutritional value among the villagers who live in the Shivalik mountain ranges. Both amaranth and quinoa from South America (Andes Mountains) have become popular grains in the West, especially for those who prefer a gluten-free regimen. The demand for quinoa as a superfood has raised serious concerns about sustainability in South American countries which supply more than 90% of this commercially available grain. In modern taxonomy quinoa is known as a pseudo-grain and not officially classified as a millet, but nevertheless has many similarities with traditional members of the millet family used in Ayurveda. Like millets, it is gluten-free and also has outstanding nutritional qualities. But unlike most other grains, quinoa contains the whole range of amino acids making it a comprehensive source of protein.

Estimates of the protein content range up to about 20% depending on the variety. The heirloom hulled proso millet (broom corn or common millet) is known for its higher alkalinity, and is readily available in the USA.

Commercially available rice and wheat do not compete well with millets when it comes to standard nutritional markers. Virtually all varieties of millets have a higher proportion of dietary fibre than rice and wheat. Millets also have a good range of amino acids with a protein content comparable to rice and wheat. Millets are ahead hands down with respect to their mineral content. Calcium and iron are abundantly richer than in rice. Millets are a good natural source of the micronutrient beta-carotene, which is not found in rice, and their broad micronutrient profile is also unrivalled by rice. Millets are also a rich source of phosphorus. A cooked cup of most millet varieties provides about one quarter of the daily requirements of phosphorus and magnesium. Due to their high magnesium content, millets are deemed to be healthy for the heart.

Ayurvedic usage of millets varies according to landrace availability and season. Traditional womenfolk prepare several dishes with millets for daily consumption and especially during festivals. Millets have enjoyed a special significance in many local diets as a choice food, and therefore maintenance of the landrace quality is deemed as an important factor in preserving this traditional resource. Millet preparations are used to treat a variety of illnesses and promote good health. For example, millets have been used for women's prenatal and postnatal care. Pregnant and lactating women often prefer a millet-based diet because it provides energy without the attendant weight gain. Pregnant women believe that the consumption of millets helps to induce lactation and maintain postpartum energy levels.

In India, kodo millet often replaces rice as the cooked grain, sometimes as a traditional ethnomedicine to reduce inflammation or cleanse the bowels. Fine powders from seed husks are used as vitamin supplements. Following harvest, seed husks are removed and stone ground into a fine powder. A thin layer of fine particles that collects as somewhat slimy powder on the edges of the stone mill is gently rolled into small balls. These are stored in cool places to be served as 'vitamin balls' to weak children and deficient moms, and consumed before they dry out and crack.

While sorghum (*jowar*) proteins are known to be slightly less digestible than maize, when hulled and cooked as per the Ayurvedic way, they do not cause much of an issue. Unlike maize, sorghum does not develop aflatoxins before harvest. Aflatoxins come about in sorghum when high-moisture sorghum grains are stored improperly. There are other mycotoxins to which sorghum and pearl millet are resistant thereby deemed as an advantage over maize.

Millets are known to have higher proportions of amylose, which is why sugars are more slowly released into the bloodstream. Thus millets slow down the metabolism as well as the digestion. Moreover, the high levels of magnesium in millets help increase insulin sensitivity, thereby insulin can work more effectively to reduce sugars in the blood. Thus millets have beneficial effects by helping to lower blood

glucose levels and thereby lowering the risk of diabetes. In addition, millets are high in dietary fibre because they are ground as whole grain with their skins intact and retain more protein and extra fibre.

✧ Savour the millet grain

Millets are considered *rājasic* (somewhat heating and not light or fluffy) and therefore need a balancing preparation even before being complemented by legumes and vegetables. Ayurvedic preparation allows for this balancing so that the millet meal does not have a *virya* that is hot to the digestive system. In Ayurveda, *virya* implies potency with regard to the heating or cooling properties of substances when they reach the seat of *agni* (during digestion). For example, Ayurveda advises diabetics to eat a warm meal of the pearl millet grit (broken *bajra*) as this does not increase the 'heat' (the resulting *virya* is not hot) and does not cause constipation. On the contrary, this type of millet porridge helps maintain weight and does not provoke 'bad' cholesterol. Others attempt to treat diabetes by consuming finger millet in the form of fermented bread. Flatbreads made of stone ground sorghum, pearl millet, finger millet and foxtail millet are common in an Ayurvedic meal. However, these should always be supplemented by the balancing effect of legume soups preferably made from seasonal pulses. One generally does not take a millet flatbread and eat it like a whole-wheat bread sandwich!



Agriculturally suitable and environmentally adaptable, millets are also nutritionally favourable and deliver an excellent grain complement to legumes including soups made from pulses. Millets bear high solar energy (*agni*) whereas rice is said to imbibe and grow with lunar energy (*soma*). Highest among the *agni*-based foods, as is also proven from these plants needing low water, millets can be eaten without the considerations that are applied to a *soma*-based food such as rice. Those Ayurvedic foods which have more *soma*, such as rice, need to be used seasonally based on the harvest cycles, and as much as possible sourced locally. Contrarily, foods with high *agni*, such as millets, can be eaten without geographical considerations, and for that matter can be stored longer.

We all need to support the cultivation of heirloom millets for the benefit of humankind. Humankind has tilled the land for thousands of years and vegetarians have thrived since ancient times, especially in India. Based on archaeo-genetic data collating migratory patterns (including the migration of the domesticated mouse, black rat and zebu cows), agriculture is deemed by some experts to have been practised continuously since about 15,000 years ago, especially in the Gangetic plains of India!

After all, not all of our ancestors have been primarily hunters who survived exclusively on animal protein and fish. A vegetarian diet does not need to be deficient in anything though there is some concern today about getting enough of the vitamin B group. Our grandparents' generation did not exhibit deficiencies in vitamins because they balanced their food as per the wisdom tradition. Vegetarians have frequently thrived on millet meal with a hearty legume soup alongside ripe fruits and fresh vegetables. Ayurveda deems the combination of millet meal and legume soup as very satiating and nutritionally beneficial as long as the preparations are balanced or lightly cooked using Ayurvedic principles.

Seeds related to the millet family		
Popular English name	Common Indic name	Distinguishing features
Pearl	<i>bajra, kambu</i>	Millet highest in folic acid and vitamins A & E. High in calcium.
Sorghum	<i>jowar, cholam</i>	Good source of vitamins B6 & B5.
Foxtail	<i>tinnai</i>	High in phosphorus. High in vitamin E.
Barnyard	<i>jhangora, kudiraivāli</i>	High in phosphorus. Millet lowest in carbohydrate.
Kodo	<i>kodri, thirivaragu</i>	Light red to dark grey. Extremely rich in iron. Used as a traditional vitamin supplement.
Little	<i>moraiyo, samai</i>	Generally consumed as substitute for rice. Millet highest in fat.
Finger	<i>rāgi, keshvaragu</i>	High in calcium – many times more than in rice and wheat. High in potassium and vitamins A & E.
Proso (common millet or broom corn)	<i>barri, vari, panivaragu</i>	Red but yellow when hulled. Popular as golden millet in the USA.
Amaranth	<i>rajgira</i>	High in phosphorus and magnesium.
Teff		Brown tiny seeds, considered to be the cousin of finger millet. High in calcium. Ethiopia's staple food now also being grown in the USA.
Quinoa		High content of protein with whole range of amino acids. Booming popularity but rising concerns about sustainability.



Food Guidelines for Ayurvedic Dosha Constitution

	VĀTA		PITTA		KAPHA	
	Pacifying	Provoking	Pacifying	Provoking	Pacifying	Provoking
FRUITS	<i>most sweet fruits</i> apples, <i>cooked</i> applesauce apricot banana berries cherries coconut dates, <i>fresh</i> figs, <i>fresh</i> grapefruit kiwi lemon lime mango melons, <i>sweet</i> orange papaya peach pear pineapple plum prunes, <i>soaked</i> quince raisins, <i>soaked</i> rhubarb tamarind OCCASIONAL USE: avocado grapes strawberries tamarind tomatoes, <i>cooked</i>	<i>most dried fruits</i> <i>most sour fruits</i> apples, <i>raw</i> cranberries dates, <i>dry</i> figs, <i>dry</i> pear persimmon pomegranate prickly pear prunes, <i>dried</i> raisins, <i>dried</i> tomatoes, <i>raw</i> watermelon	<i>most sweet fruits</i> apples, <i>sweet</i> applesauce apricots, <i>sweet</i> berries, <i>sweet</i> coconut dates figs, <i>fresh</i> grapes, <i>red & purple</i> mangoes, <i>ripe</i> melon oranges, <i>sweet</i> pear pineapple, <i>sweet</i> plums, <i>sweet</i> pomegranate raisins watermelon OCCASIONAL USE: avocado cherries, <i>sweet</i> dried fruit kiwi lemon lime papaya prunes, <i>soaked</i> quince rhubarb strawberry tamarind	<i>most sour, acidic fruits</i> apples, <i>sour</i> apricots, <i>sour</i> banana berries, <i>sour</i> cherries, <i>sour</i> cranberries grapefruit grapes, <i>green</i> lemon mangoes, <i>green</i> oranges, <i>sour</i> papaya peach persimmon pineapple, <i>sour</i> plums, <i>sour</i> prickly pear rhubarb tamarind tomato	<i>most astringent fruits</i> apple applesauce apricot berries cherries cranberries figs, <i>dry</i> persimmon pomegranate quince raisins OCCASIONAL USE: coconut grapes kiwi lemon lime mango orange peach pear prune strawberries tamarind tangerine	<i>most sweet/sour fruits</i> avocado banana coconut dates figs, <i>fresh</i> grapefruit kiwi mango melon orange papaya pineapple plums rhubarb tamarind tomatoes, <i>raw</i> watermelon

	VĀTA		PITTA		KAPHA	
	Pacifying	Provoking	Pacifying	Provoking	Pacifying	Provoking
	<i>cooked vegetables</i> asparagus beets, <i>cooked</i> carrot cucumber fennel, <i>mildly cooked</i> garlic, <i>cooked</i> green beans jerusalem artichokes leafy greens, <i>mild</i> leeks, <i>cooked</i> lettuce okra, <i>cooked</i> onion, <i>cooked</i> peas, <i>cooked</i> pumpkin rutabaga spinach, <i>cooked</i> squash, <i>summer</i> sweet potato taro root watercress yam OCCASIONAL USE: artichokes, <i>cooked</i> cabbage, <i>cooked</i> cauliflower, <i>cooked</i> cilantro corn green chilies, <i>roasted</i> horseradish mustard green olives, <i>black</i> parsley parsnip radishes, <i>cooked</i> spaghetti squash zucchini	<i>frozen, raw or dry vegetables</i> bitter melon broccoli brussel sprouts burdock root cabbage, <i>raw</i> cauliflower, <i>raw</i> celery corn dandelion greens eggplant kale kohlrabi leafy greens, <i>strong</i> leeks, <i>uncooked</i> lettuce mushrooms olives, <i>green</i> onion, <i>raw</i> peas, <i>raw</i> peppers, <i>sweet or hot</i> potatoes, <i>white</i> prickly pear leaves radish, <i>raw</i> spinach, <i>raw</i> sprouts squash, <i>winter</i> turnips wheat grass sprouts	<i>sweet & bitter vegetables</i> artichoke arugula asparagus broccoli brussel sprouts cabbage cauliflower cucumber dandelion greens green beans jerusalem artichoke kale leafy greens lettuce mushrooms okra parsnip peas potatoes, <i>sweet, white</i> rutabaga spaghetti squash sprouts, <i>not spicy</i> taro root watercress, <i>small quantity</i> OCCASIONAL USE: beets, <i>cooked</i> bitter melon carrots, <i>cooked</i> celery cilantro fennel leeks, <i>cooked</i> olives, <i>black</i> onions, <i>cooked</i> parsley peppers, <i>green</i> pumpkin radishes, <i>cooked</i> spinach, <i>cooked</i> squash, <i>summer or winter</i> zucchini	<i>pungent vegetables</i> beet greens beets, <i>raw</i> burdock root carrots, <i>raw</i> daikon radish eggplant garlic green chilies horseradish leeks, <i>raw</i> mustard greens olives, <i>green</i> onions, <i>raw</i> peppers, <i>hot</i> radishes, <i>raw</i> spinach, <i>raw</i> swiss chard turnip turnip greens	<i>pungent & bitter vegetables</i> arugula asparagus beet beet greens bitter melon broccoli brussel sprouts burdock root cabbage carrot cauliflower celery corn daikon radish dandelion greens eggplant green beans horseradish jerusalem artichoke kale kohlrabi leafy greens leek lettuce mustard greens okra onion peas peppers, <i>sweet & hot</i> potato prickly pear leaves rutabaga spaghetti squash spinach sprouts turnip turnip greens watercress OCCASIONAL USE: artichoke chilies, <i>green</i> cilantro fennel garlic mushrooms parsnip peppers, <i>green</i> radishes squash	<i>sweet & juicy vegetables</i> cucumber mushrooms olives, <i>black or green</i> parsnip pumpkin squash, <i>summer</i> sweet potato taro root zucchini

	VATA		PITTA		KAPHA	
	Pacifying	Provoking	Pacifying	Provoking	Pacifying	Provoking
GRAINS	oats, <i>whole cooked</i> pancake quinoa rice: basmati brown sushi white wild sprouted wheat sprouted wheat bread OCCASIONAL USE: amaranth durum flour polenta quinoa rice cake wheat	barley bread, <i>with yeast</i> buckwheat cereal, <i>cold, dry or puffed</i> corn couscous crackers granola, <i>dry</i> millet muesli oat bran rye sago spelt tapioca wheat bran	barley bread, <i>without yeast</i> oats, <i>whole cooked</i> pancake rice: basmati brown, <i>sweet</i> sprouted wheat sprouted wheat bread wheat OCCASIONAL USE: amaranth buckwheat cereal couscous crackers durum flour granola muesli oat bran pasta polenta quinoa rice cake rice, <i>brown</i> spelt sushi rice tapioca wheat bran	bread, <i>with yeast</i> buckwheat corn millet oats, <i>dry</i> rice, <i>in excess</i> rye	barley buckwheat cereal, <i>cold, dry or puffed</i> cereal, <i>millet, barley</i> corn couscous durum flour: barley millet rye millet oat bran rice, <i>wild</i> rye sago sprouted wheat sprouted wheat bread OCCASIONAL USE: amaranth basmati rice granola muesli oats, <i>dry</i> polenta rice cakes tapioca wheat bran wheat	bread, <i>with yeast</i> oats, <i>cooked</i> pancake pasta quinoa rice, <i>brown or white</i> spelt
LEGUMES	green gram, <i>mung beans</i> pigeon peas, <i>toor</i> tofu, <i>cooked</i> OCCASIONAL USE: azuki beans black bengal gram, <i>urad</i> lentils, <i>red</i> miso	black beans black-eyed peas chickpeas, <i>garbanzo or chana</i> kidney beans lentils, <i>brown</i> lima beans, <i>rangooni val</i> navy beans peas, <i>dried</i> pinto beans soy beans soy flour soy powder split peas tempeh white beans	azuki beans black beans black-eyed peas chickpeas, <i>garbanzo or chana</i> green gram, <i>mung beans</i> lentils, <i>brown</i> lima beans, <i>rangooni val</i> navy beans pinto beans soy beans split peas OCCASIONAL USE: kidney beans peas, <i>dried</i> tofu, <i>cooked</i> white beans	black bengal gram, <i>urad</i> lentils, <i>red</i> miso pigeon peas, <i>toor</i> soy meats soy sauce	azuki beans black beans black-eyed peas chickpeas, <i>garbanzo or chana</i> lima beans, <i>rangooni val</i> navy beans pigeon peas, <i>toor</i> pinto beans split peas OCCASIONAL USE: green gram, <i>mung beans</i> kidney beans lentils, <i>red</i> miso peas, <i>dried</i> soy beans tofu, <i>cooked</i> white beans	black bengal gram, <i>urad</i> kidney beans lentils, <i>brown</i> miso soy beans soy cheese soy flour soy powder soy sauce tempeh tofu, <i>cold</i>

	VĀTA		PITTA		KAPHA	
	Pacifying	Provoking	Pacifying	Provoking	Pacifying	Provoking
OILS	<i>most oils</i> almond avocado canola coconut, <i>in moderation</i> ghee olive peanut sesame sunflower	animal fat corn flax seed mustard seed	avocado canola coconut flax seed ghee olive primrose soy sunflower walnut	almond animal fat apricot corn mustard seed safflower sesame, <i>dark</i>	<i>in small amounts</i> canola corn flax ghee, <i>in moderation</i> mustard seed sunflower OCCASIONAL USE: almond coconut safflower sesame	almond apricot avocado coconut olive primrose safflower sesame soy walnut
NUTS	<i>should be soaked</i> black walnut charole coconut OCCASIONAL USE: almond brazil nut cashew chestnut filbert hazelnut macadamia peanuts, <i>seldom OK</i> pecan pine nut pistachio walnut	<i>in general, roasted nuts</i>	charole coconut OCCASIONAL USE: almonds, <i>soaked, peeled</i>	<i>most nuts</i> almonds, <i>with skin</i> black walnut brazil nut cashew filbert hazelnut macadamia peanut pecan pine nut pistachio walnut		<i>all nuts</i> almond black walnut brazil nut cashew charole coconut filbert hazelnut macadamia peanut pecan pine nut pistachio walnut
SEEDS	OCCASIONAL USE: chia flax psyllium, <i>seldom ok</i> pumpkin sesame sunflower, <i>roasted</i> tahini	popcorn	OCCASIONAL USE: flax popcorn, <i>with butter, no salt</i> poppy seeds psyllium pumpkin sunflower water chestnut	<i>most seeds</i> chia sesame, <i>black or white</i> tahini	OCCASIONAL USE: chia flax popcorn, <i>no salt or butter</i> poppy psyllium pumpkin sesame sunflower	<i>all seeds</i> sesame tahini

VĀTA		PITTA		KAPHA	
Pacifying	Provoking	Pacifying	Provoking	Pacifying	Provoking
ajwain allspice anise asafoetida, <i>hing</i> basil bay leaf black pepper cardamom cinnamon cloves coriander cumin dill fennel garlic ginger marjoram mint mustard seeds nutmeg orange peel oregano paprika parsley peppermint pippali poppy seeds rosemary saffron salt savory spearmint star anise tarragon thyme turmeric vanilla wintergreen	caraway chili peppers, <i>hot</i> garlic, <i>raw</i>	cilantro coriander cumin fennel mint neem leaves peppermint saffron turmeric wintergreen OCCASIONAL USE: almond extract basil, <i>fresh</i> black pepper caraway cardamom cinnamon clove curry powder dill ginger, <i>fresh</i> nutmeg orange peel parsley rosewater tamarind tarragon vanilla	<i>most hot spices</i> ajwain allspice anise asafoetida, <i>hing</i> basil, <i>dry</i> bay leaf cayenne clove fenugreek garlic ginger, <i>dry</i> horseradish mace marjoram mustard seeds nutmeg oregano paprika pippali poppy seeds rosemary sage salt savory spearmint star anise thyme	<i>most spices</i> ajwain allspice anise asafoetida, <i>hing</i> basil bay leaf black pepper caraway cardamom cayenne cinnamon clove coriander cumin dill fennel fenugreek garlic ginger horseradish marjoram mint mustard seeds neem leaves nutmeg onion orange peel oregano paprika parsley peppermint pippali poppy seeds rosemary rosewater saffron sage savory spearmint star anise tarragon thyme turmeric vanilla wintergreen OCCASIONAL USE: tamarind	mango powder salt

	VĀTA		PITTA		KAPHA	
	Pacifying	Provoking	Pacifying	Provoking	Pacifying	Provoking
DAIRY	<p>most dairy buttermilk cheese, soft from cow milk cottage cheese cow's milk, especially warm & spiced ghee</p> <p>OCCASIONAL USE: butter cream cheese goat's cheese goat's milk ice cream, small quantity ok sour cream yogurt, diluted & spiced is best</p>	<p>cheese, hard powdered milk, cow's or goat's yogurt, plain, frozen or with fruit</p>	<p>butter, unsalted cottage cheese cow's milk ghee, in small quantity</p> <p>OCCASIONAL USE: cheese, soft, not aged, unsalted goat's cheese, soft, unsalted goat's milk ice cream, homemade sour cream yogurt, freshly made, diluted, sweetened</p>	<p>most commercially processed products butter, salted buttermilk cheese, hard sour cream yogurt, plain, frozen or with fruit</p>	<p>OCCASIONAL USE: butter, unsalted, very seldom cottage cheese ghee, in moderation goat's cheese, unsalted goat's milk, skim only yogurt, diluted, spiced</p>	<p>butter buttermilk cheese, soft or hard cottage cheese cow's milk ice cream sour cream yogurt, frozen or with fruit</p>
SWEETENERS	<p>amasake, rice milk barley malt brown rice syrup dates fructose fruit juice concentrate honey, raw jaggery sukanat sugar cane, dried or fresh turbinado</p> <p>OCCASIONAL USE: dried fruit maple syrup molasses</p>	<p>brown sugar honey, cooked sugar substitutes white sugar</p>	<p>barley malt dates fructose fruit juice concentrate maple syrup rice syrup sukanat sugar cane, dried or fresh sweet fruit turbinado</p>	<p>brown sugar honey jaggery molasses sugar substitutes white sugar</p>	<p>honey, raw</p> <p>OCCASIONAL USE: brown rice syrup dates dried fruit maple syrup</p>	<p>barley malt brown sugar fructose honey, cooked jaggery maple syrup molasses rice syrup sugar cane juice sugar substitutes turbinado white sugar</p>

	VĀTA		PITTA		KAPHA	
	Pacifying	Provoking	Pacifying	Provoking	Pacifying	Provoking
	chutney, <i>mango & coconut</i> gomasio lime pickle mayonnaise, <i>non-commercial</i> mustard olives, <i>black</i> pickles salt, <i>rock or sea</i> tamarind OCCASIONAL USE: black pepper cilantro coconut coriander leaves horseradish kelp lemon lime tamari vinegar	chili pepper chocolate ketchup onion, <i>raw</i> salt, <i>iodized</i>	chutney, <i>sweet, mango, coconut</i> cilantro coconut, <i>grated</i> mint leaves rose water OCCASIONAL USE: black pepper dulse, <i>rinsed</i> hijiki kombu lime orange peel salt sprouts tamari vinegar	chili chocolate horseradish kelp ketchup lemon mayonnaise mustard pickles seaweed	OCCASIONAL USE: black pepper chili pepper chutney, <i>mango, spicy</i> cilantro coriander leaves dulse garlic hijiki horseradish ketchup, <i>small quantity</i> mint leaves mustard rose water salt, <i>rock or sea</i> scallion seaweed sprouts vinegar yogurt, <i>spiced</i>	almond extract chocolate chutney, <i>sweet</i> coconut milk kelp kombu lemon lime lime pickle mango pickle olives, <i>all kinds</i> pickles salt, <i>iodized</i> soy sauce tamari
CONDIMENTS						
	almond milk aloe vera juice berry juice carrot juice grape juice lemonade mango juice orange juice peach nectar pineapple juice sour juices & teas OCCASIONAL USE: apple juice chai, <i>hot spiced milk</i> grain coffee <i>substitutes</i> grapefruit juice prune juice rice milk soy milk	apple juice caffeinated drinks carbonated drinks chocolate milk coffee cold drinks cranberry juice iced tea icy cold drinks pomegranate juice prune juice soy milk, <i>cold</i> tomato juice vegetable broth	aloe vera juice apple juice apricot juice berry juice, <i>sweet</i> carob grape juice mango juice mixed veggie drinks peach nectar pear juice soy milk OCCASIONAL USE: almond milk chai, <i>hot spiced milk</i> cherry juice, <i>sweet</i> cool dairy drinks grain coffee <i>substitutes</i> pomegranate juice prune juice	banana shakes caffeinated drinks carrot juice, <i>seldom</i> cherry juice, <i>sour</i> chocolate milk coffee cranberry juice grapefruit juice iced tea icy cold drinks lemonade orange juice, <i>seldom</i> papaya juice pineapple juice salted drinks sodas sour juices	aloe vera juice apple cider, <i>small quantity</i> apple juice apricot juice caffeinated drinks carob carrot juice cherry juice, <i>not sour</i> cranberry juice grain coffee <i>substitutes</i> grape juice mango juice mixed veggie drinks peach nectar pomegranate juice prune juice soy milk, <i>spiced and hot</i> vegetable broth OCCASIONAL USE: berry juice	<i>excess fluid</i> almond milk chai, <i>hot spiced milk</i> chocolate drinks coffee cold drinks grapefruit juice iced tea icy cold drinks lemonade orange juice papaya juice pineapple juice rice milk sodas sour juices soy milk sweet wine or liquor tomato juice
BEVERAGES						

VATA		PITTA		KAPHA	
Pacifying	Provoking	Pacifying	Provoking	Pacifying	Provoking
ajwain aloe vera amla asafoetida ashwagandha bala basil black pepper brahmi bringaraj camphor cardamom cayenne cinnamon clove coriander elderflower eucalyptus fennel leaves fennel seeds garlic ginger, <i>fresh</i> haritaki lavender lemon grass licorice lotus marshmallow nutmeg orange peel parsley peppermint pippali poppy seeds psyllium rose hips saffron sandalwood sarsaparilla shatavari spearmint	alfalfa bibhitaki, <i>in excess</i> black tea blackberry burdock chrysanthemum dandelion echinacea flaxseed golden seal hibiscus, <i>flower</i> horsetail manjishtha mint musta, <i>in excess</i> neem nettle raspberry red clover, <i>large</i> rhubarb sage turmeric, <i>in excess</i> violet, <i>large</i> wintergreen, <i>large</i> yarrow	aloe vera amla bala bibhitaki blackberry brahmi bringaraj catnip chamomile chicory chrysanthemum cilantro comfrey coriander dandelion echinacea elderflower fennel leaves fennel seeds flaxseed golden seal haritaki horsetail jasmine lavender lemon balm lotus manjishtha marshmallow mint musta neem passion flower peppermint psyllium raspberry rhubarb rose petals saffron sandalwood shatavari spearmint turmeric violet wild yam wintergreen	ajwain asafoetida ashwagandha basil black tea camphor cardamom cayenne cinnamon clove eucalyptus fenugreek garlic ginger, <i>dry or powdered</i> ginseng hawthorn hyssop juniper berries nutmeg oregano parsley pippali poppy seeds red zinger rose hips, <i>large</i> rosemary sage sesame seeds thyme turmeric, <i>in excess</i> yerba mate	ajwain alfalfa aloe vera asafoetida ashwagandha barley basil bibhitaki black pepper brahmi bringaraj camphor cardamom cayenne chamomile chicory chrysanthemum cilantro cinnamon clove coriander dandelion dill echinacea elderflower eucalyptus fennel seeds flaxseed garlic ginger, <i>dried</i> golden seal haritaki hibiscus, <i>flower</i> horsetail jasmine lavender lemon balm mint neem nettle nutmeg orange peel, <i>small quantity</i> parsley passion flower peppermint pippali poppy seeds raspberry rhubarb rose petals saffron sage spearmint thyme turmeric violet wheat grass yarrow	<i>excess fluid</i> amla bala, <i>in excess</i> comfrey licorice lotus marshmallow psyllium red zinger rose hips sandalwood, <i>in excess</i> sesame seeds shatavari
OCCASIONAL USE: alfalfa barley chamomile comfrey fenugreek ginseng hawthorn hyssop jasmine juniper berries passion flower rose petals sage strawberries yerba mate		OCCASIONAL USE: alfalfa barley basil burdock cardamom ginger, <i>fresh</i> hibiscus lemongrass licorice nettle orange peel parsley red clover rose hips sarsaparilla strawberries yarrow		OCCASIONAL USE: black tea, <i>with ginger</i> blackberry burdock comfrey fennel leaves fenugreek ginseng	juniper lemon grass red clover rose hips sarsaparilla wintergreen yerba mate



Food Compatibility Guide

Food	Incompatible with
Milk	Fruit, Curd (yogurt), Soup or porridge made with pulses (legumes)
Curd	Milk, Cheese, Hot drink, Fruit, Starch
Honey	Grains, Ghee in equal amount
Lemon	Milk, Curd, Tomato, Cucumber
Nightshade	Milk, Curd, Melon, Cucumber
Starch	Milk, Fruit
Radish	Milk, Fruit
Corn	Fruit

Do not heat honey. Avoid fruit milkshakes and fruit smoothies made with milk or curd (yogurt). Mango *lassi* is not a wise choice. Mixed fruit salads are not recommended. Blending some fruits for juicing is generally okay; avoid mixing melon with any other food.

Among the vegetables in the nightshade family are potatoes, tomatoes, eggplants (brinjals) and bell-peppers. They are often avoided because their regular intake can clog our *nādi* over time; they require antidotes plus spices for balancing the Ayurvedic way. Sweet potatoes are not nightshades!



The Healing Art of Ayurvedic Cooking

The organic relationship between the six tastes (*rasa*) and the three *dosha* is at the root of Ayurvedic dietetics. Each of the six tastes is capable of affecting the individual *dosha* (VPK) in a sedative or additive way.

For example, foods containing *madhura-rasa* where both *rasa* (taste) and *vipāka* (post-digestive effect) are sweet share the same composition from earthy and watery elements as the Kapha *dosha*. Thus *madhura-varga* food, which is capable of providing energy by breaking down into sugar, adds to the Kapha constituency but at the same time sedates the Vāta *dosha*. This is because the composition of the Vāta constituency is ruled by air and ether elements and is dissimilar to such an extent from Kapha that the same food can be deemed to produce the opposite effect on Vāta *dosha*. Ayurvedic food preparation is based on the axiom that similar components add while dissimilar detract. Therefore, similarity of components is additive while dissimilarity is sedative.

Cooking is an art. Ayurvedic cooking is the art of balancing ingredients while inducing *prāna*. Most importantly, all six tastes are balanced during the cooking. Ayurveda recommends light cooking under controlled heat using heavy nonreactive pots and pans. In order to preserve *prāna*, overheating and losing the original colour and nascent taste of the vegetable is not recommended. The cooked food needs to exude light and be full of energy (*prāna*) with the vegetables retaining some of their original freshness. For example, the okra needs to be radiant green and not dripping with oil or the broccoli needs to be bright green and still somewhat crunchy!

The modern science of dietetics is somewhat lopsided because of its focus on the class of nutrients based on the quantities of calories, fats, proteins, carbohydrates, etc. There is little or no reference to the seasonal rhythms, geographical location of where the food is grown, digestive capacity of the individual, biorhythms of the eater and other holistic factors. The reductionistic approach is not practical for the consumer, to say the least. Moreover, modern dietary advice is diverse and sometimes contradictory. With confusing notions, it is hard to know what to eat and what not to eat. Food has also become like fashion with changing food fads based on commercially hyped trends. In addition, we can become disconnected from fresh (high *prānic*) food and resort to eating processed or packaged convenience foods. Ingredients in cooking that come from heirloom varieties, maintaining the organic continuity of their life force, are not worth compromising. The time-honoured wisdom of Ayurveda provides a secure traditional platform in the field of nutrition and health to guide towards a spiritual, mindful lifestyle.

Ayurveda shows how mental clarity, emotional states (moods) and the welfare of the body are linked to diet. Nevertheless, the diet needs to be adapted to the unique mind-body constitution or *dosha* of an individual (whether pacifying or provoking).

The food we eat is one of the prime influences on our state of health and we have good influence over our food choices. Ayurvedic tenets proclaim that "disease is a result of assault against one's own intelligence." Though certain ailments fructify without being self-inflicted in this lifetime, many are the result of making poor or misinformed food choices. We have to face the consequences of those choices sooner or later.

Ayurvedic dietetics explains the thesis of *āhār-mimāṃsā* centred upon the *agni-bala* or the strength of the digestive fire that determines the digestive capacity of the eater. There are of course principle tendencies based on the triple *dosha* constitution. Associated with Vāta is the *vishamāgni* which indicates irregular metabolism. Associated with Pitta is the *tixnāgni* which indicates hyper-metabolism. Associated with Kapha is the *mandāgni* which indicates hypo-metabolism. Whereas the balanced kind is called the *samāgni* favouring balanced metabolism. The quantity of edibles (*mātrā*) that are being properly digested and assimilated into the bodily tissues, and what is excreted are given special importance. You are what you digest! These variables differ with individual constitutions, digestive power, moods and feelings, diurnal and seasonal rhythms among other lesser influences (such as cleanliness, ambience during eating, etc.). Ayurvedic culinary art is unique due to its emphasis on balancing ingredients and spices in a way to achieve optimal digestibility with a diet adapted to *dik* (direction or locale) and *kāla* (time of month and day, etc.). The satiating potency and *prāṇic* food value are based upon the singular axiom that the whole is much greater than the sum of its parts, just like the wholeness of the body itself. Therefore, cooked food must be much more than the sum of its ingredients.

Vāgbhata, a great *Ayurvedācharya* (Ayurvedic adept), has enumerated ten pairs of attributes exhibiting opposing qualities that apply equally to a food item or a specific *dosha*.

Ten pairs of opposing qualities

Guru (heavy, trophic)	↔	Laghu (light, atrophic)
Manda (slow, sedative)	↔	Tixna (sharp, purifying)
Hima (cold, arrestive)	↔	Ushna (hot, diaphoretic)
Snigdha (oily, moistening)	↔	Ruxa (dry, absorptive)
Slaxna (smooth, slimy)	↔	Khara (rough, scratchy)
Sāndra (viscid, dense)	↔	Drava (liquid, solvent)
Mridu (soft, mild)	↔	Kathina (hard, solidifying)
Sthira (stable, steadying)	↔	Chala (mobile, propelling)
Sūxma (subtle, penetrative)	↔	Sthula (gross, obstructive)
Vishada (clear, separating)	↔	Pichchhala (cloudy, compacting)

It is worth briefly revising these qualities juxtaposed with observable features of specific *dosha*.

Vāta	dry, light, cold, rough, subtle, and mobile
Pitta	somewhat oily, light, sharp, hot, mobile, liquid, and a peculiar unripe odour (<i>āma-gandha</i>)
Kapha	oily, cold, heavy, slow, smooth, steady, and an earthy odour (<i>mr̥itsnā</i>)

As in the assignment of these qualities according to *dosha*, each kind of food bears such qualities as per the organic continuity of co-evolving natural counterparts. These qualities obviously have a direct effect on the emotions or moods and how the body digests a particular food. One can easily become irritable after eating hot (chili) food. When the qualities of food are similar to the qualities of a *dosha*, ingestion will tend to aggravate the *dosha*. Likewise opposing qualities of food will tend to pacify the *dosha*. Such a basic understanding is therefore helpful in developing a cooking strategy which will be pacifying and not provoking to the mind-body *dosha* constitution.

In this respect, simple examples of food qualities help fortify the understanding of their selection in Ayurvedic cooking and meal planning.

Light	sprouts, popcorn
Heavy	whole beans, cheese
Slow	yogurt (curd)
Sharp	garlic, onion
Cold	mint, melon
Hot	chili pepper, black pepper
Oily	coconut, avocado
Dry	rye, millet
Stable	ghee
Mobile	alcohol, sprouts



Choosing the right combination of food groups and cooking them optimally to retain their high *prāṇic* vibration is nourishing when all six tastes are also balanced. The art of Ayurvedic cooking is incomplete without the effort to balance the tastes while preparing a wholesome meal. Often it is only possible to bring about the balance through different items of the meal menu eaten in an order. This is done to retain the flavour and texture of a particular dish. Such an effort to balance the tastes is also a common strategy. The order in which the individual savoury or sweet dish is served or ingested is then adjusted to increase digestion and promote sumptuousness.

Understanding of food passage in stages of *rasa* (taste), *virya* (heating or cooling energy), and *vipāka* (post-digestive effect) are part of basic training in Ayurvedic cooking. The overall result of digestion is controlled by the *prabhāva*, which is an unapparent result due to the hidden action of food. Each taste (*rasa*) whether used collectively or individually in proper doses aids systemic balance at the *dosha* level

and promotes health and healing. While taste is felt on the tongue, the *virya* is felt as heating or cooling energy in the mouth and the stomach. Sweet taste is known to yield cooling energy. Thus, the sweet-tasting food that is pleasing to the Pitta and Vāta types can be Kapha provoking. Bitter-tasting foodstuffs are cooling with the exception of turmeric which is heating. It is good to know the *vipāka* for each taste group and applicable exceptions to better understand the post-digestive effect of food on the body and mental awareness. As a specific example, pomegranate, which has an astringent *rasa*, has a sweet *vipāka*. Tabular presentation summarizing the effect of six tastes on *dosha* is helpful (shown in the Life Principles section of this workbook) in understanding the healing effect of cooking.

The experience of taste (*rasa*) that is accentuated a short while later by the feeling of heating or cooling energy (*virya*) further produces an impact that shows up on the sweat, urine and faeces due to the post-digestive effect (*vipāka*). Hot chilies will be pungent to the taste followed by a feeling of heat and will then bring about a burning sensation subsequently in urine and faeces. Traditionally, hot chilies are used in specific environments or climates, wherein *rājasika* qualities are increased in food preparation. Implementing these principles in cooking helps develop a good understanding of how food impacts the bodily systems. What is beyond normal predictability is the *prabhāva*, which is a dynamic and hidden action of food based on a specific substance or the make-up of the food. The result is somewhat unpredictable because foodstuffs with similar *rasa*, *virya* and *vipāka* can still yield a different action and consequently a different result. An example is the ghee and honey given together to the newborn baby as the first lick besides the mother's milk. The *prabhāva* is inferior when they are mixed in equal amounts but acceptable when ghee is double that of honey! This regimen requires deeper study of Ayurvedic food combinations and the art of healing through cooking.

While the selection of the right food ingredients in measured proportions is important, the *feelings* added by the cook are also important. Subtle feelings of devotion and loving thoughts greatly add to the life force from the heat applied during the cooking. Therefore, the good intentions and good mood of the cook imbue the food with some indefinable vibration that enhances the quality of the eating experience. A mother's cooking always tastes divine to her children because it is filled with love. As you explore the art of Ayurvedic cooking, you can experiment with recipes. As long as you use healthy ingredients with the right proportions and cook with the right *feelings*, the meal is going to be healing.

The selected recipes in this workbook are presented for the person who wants to enhance their meditation or yogic practices and cultivate their life force and brainpower with healthful vegetarian food. The figures given in these workbook recipes are meant as guidelines. Most of the ingredients used are therefore sāttwika (fresh, organic and high prānic value). The amount of salt added in the recipes is optimal with the aim of balancing the six tastes. The recipes presented herein lack strong flavours from chilies, onions or garlic that can be stimulative or cause restlessness. Onions and garlic can be selectively used with prior knowledge of harnessing their therapeutic properties or as aphrodisiacs in special preparations.



Tomatoes in Ayurvedic Cooking

The Ayurvedic view on the use of tomato is of moderation and perhaps of caution even though it has been deemed as a low sodium addition to the food palette. Ripe heirloom tomatoes can add a satisfying flavour to almost every cooked dish and not just in Italian food. Not only a good source of vitamin C, tomatoes provide varying amounts of potassium and vitamin A. However, this is one of those fruits which is more useful when cooked rather than when eaten raw!

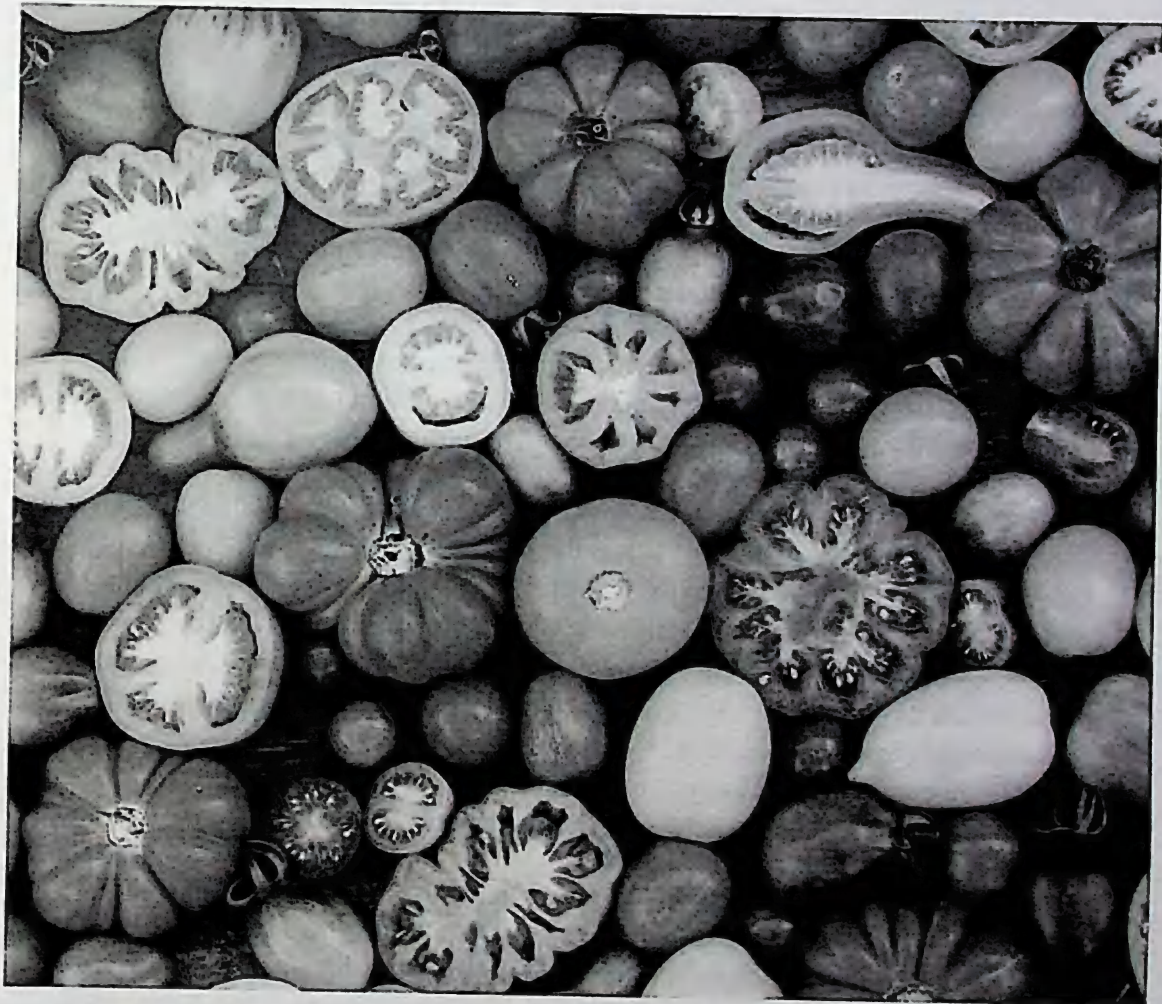


Not all tomatoes are red. Among the recommended heirloom varieties available, the purple, black and brown tomatoes are found to be the most nutritious while being sweet at the same time. Tomatoes contain a flavonoid antioxidant, lycopene, which is a colourful carotenoid (pigment). As it is tightly bound to the fruit fibres, lycopene is not soluble in aqueous solutions. It is only soluble in oil. Therefore, the Ayurvedic way is to cook or sauté the crushed (or diced) tomatoes in cooking oil in order to fully extract the lycopene.

Ayurveda recommends using tomato in a way so that the post-digestive effect (*vipāka*) is made as alkaline as possible. Tomatoes can be used in the tempering phase of most Ayurvedic dishes. Thus it is often added as an ingredient at the end to flavour most soups and many vegetable dishes. As a stand-alone dish, it is primarily in the form of chutney. Savoury and sweet tomato chutney cooked with balancing spices, using date jaggery to counteract the acidity, has been a favourite Ayurvedic chutney for many who utilize a good harvest.

Tomatoes have now become a popular crop for home gardeners but this has not always been the case. As a member of the nightshade family, during the late 16th century and early 17th century, tomatoes were shunned in Europe and even thought to be poisonous like belladonna. To this effect, the leaf of the tomato plant is somewhat poisonous! Tomato is considered to have been introduced into Europe from western South America and Central America where it was grown as a native plant. The Latin botanical name *Lycopersicon esculentum* translates into *wolf peach*, peach because it was round and luscious and wolf because it was originally believed to have magical powers to transform witches into werewolves according to folklore. Later, it became known as a 'love apple' and was grown for ornamental use until the Italian cuisine solidified its status as a major cooking ingredient. Ayurveda, of course, has its own stance on the use of fruits and nightshades as part of the diet plan. On top of this, meditators have their own food discipline, often termed as *sattwic*, which is stricter than the normal realm of standard Ayurvedic home cooking practices.

Ayurveda recommends moderation while using tomato because, after all, it is a nightshade. In general, Ayurvedic literature deems nightshades to obstruct or clog the *nādi* progressively and slowly. Meditators usually avoid regular use of tomatoes and other nightshades in order not to impact the *prāṇic* flow in the many *nādi* that are involved in breathing and meditation techniques. As per the list of friendly foods for *dosha* pacification, tomatoes are categorized as aggravating to all three Ayurvedic *dosha*. This is not to discourage the periodic *sattwic* use of dark-coloured vine-ripened heirloom tomatoes crushed and sautéed with spices to add to the sumptuous flavour.





Cooking Oils as a Dietary Supplement

⇒ High quality fat as brain food

Ayurveda recommends maintaining a good fat balance based on the compatibility of food with *dosha* constitution. Both coconut oil and *real* ghee, which are used in Ayurvedic cooking and tempering, provide high quality fats that can be rapidly metabolized. The fattiest organ in the body is the brain which is sustained especially well by high quality fats in the diet. Both pure ghee and coconut are deemed as 'brain' foods in Ayurveda. Ghee and coconut oil are also favoured in Ayurvedic cooking. Coconut oil is somewhat heavy with a tendency to dampen the *agni* for a Kapha-dominant body constitution. Whereas ghee is light and can gently stoke the *agni*. Therefore, a combination of ghee and coconut has been traditionally used to balance the intake of high quality fats while at the same time taking advantage of their high heat capacity during cooking and the tempering of spices.

Milk from indigenous breeds of cows is an elixir of life. When you purify it by gently boiling the milk-cream, you get ghee, which is deemed in Ayurveda to be the ultimate brain food, unrivalled even by coconut oil. The lighter property of pure ghee is very conducive for its balancing effects on the *agni* in the small intestine.

Ghee from a pure source can be the key to cultivating incredible memory capacity while maintaining the vital functions of the brain. Of course butter can also be clarified by boiling to produce ghee. However, the traditional Ayurvedic way is to purify the milk-cream through a distinctive transformation into ghee. Hailed as the paramount golden liquid of life, ghee forms into a granular brownish yellow fluid and retains the granular texture even when it becomes thicker at room temperature. Ghee does not go rancid as long as a dry spoon or ladle is used to prevent contamination by water. Ayurveda especially values all potions, decoctions and jams that retain *prāna* at room temperature and do not need refrigeration.

In traditional Vedic schools in India, pupils are able to memorize and recall by heart verse after verse of the Veda in Sanskrit. Trained students can recite hundreds of verses backwards or forwards! They are often fed a diet high in pure ghee from milk of indigenous breeds of Indic cows that bear the signature hump on the back. Besides the use of *shruti* memorization techniques, their enhanced memory has been traditionally attributed to the high quality ghee-fat alongside the regular usage of coconut (whether as water, freshly grated flakes or oil) in food.

Be discerning when choosing ghee. If the ghee is substandard in some way due to poor quality milk (such as predominantly A1 casein), it might not be deemed as

Ayurvedic brain food. Note that it is also possible to prepare home-made ghee from high quality cream (from primarily A2 casein milk). The high quality of whole milk from indigenous cows with a distinctive hump, horn and hoof is especially important to those who wish to develop inordinate amounts of memory. These indigenous cows in India have been found to yield milk with A2 casein but the argument for good whole milk cannot simply be reduced to A2 versus A1 casein. Ghee made from the milk of cows with a distinctive hump, horn and hoof is often called *desi-ghee* and is a rarity nowadays.

Common application of oils

Oils in general are heating in effect, naturally spreadable, sharp and subtle. Oils are capable of reducing obesity while also being known to fatten the lean. Oils are most effective in reducing the effects of exertion, more so from external oleation. Here are Ayurvedic properties of a list of select oils:

- | | |
|--------------------|---|
| Coconut oil | Heavy and cooling. Suitable for high heat tempering of spices and frying. It is useful for hair growth and to add lustre to hair. |
| Mustard oil | Slightly bitter. Hot and sharp, and therefore good for balancing the Vāta and Kapha <i>dosha</i> . |
| Sesame oil | Heavier than most other cooking oils. Excellent for external application, especially as medicated oil. Regular use as a cooking oil on Saturdays pacifies Vāta <i>dosha</i> as well as balances Saturnian energy. Oil from untoasted black sesame seeds is preferred to oil from toasted sesame seeds for both external and internal usage. |
| Neem oil | Strongly bitter. Less heating. Generally used externally, especially for skin troubles. |
| Castor oil | Heavy and viscous. Red variety is more viscous than the white kind. Bears a bitter cum pungent taste. Mainly used for relieving aches, pains and swellings. Warm oil can be taken for emesis or internal oleation. |

Oils for garnishing

Most oils that cannot be used as high heat cooking oil can be used for garnishing based on the Ayurvedic food guidelines related to *dosha* constitution. Olive oil, pumpkin seed oil and exotic nut oils such as walnut oil and pistachio oil would be deemed good and acceptable with salad greens. Moderate amounts of nut oils will generally not provoke the individual *dosha*. Most nut oils would be rated as good for garnishing salads or low heat preparation but not as cooking oil for the tempering of spices. These oils not only give extra flavour to salads but also provide a tasty way of increasing the intake of healthy fats in one's diet. Nut oils such as walnut oil are considered favourable in Ayurveda, in addition to eating raw nuts.

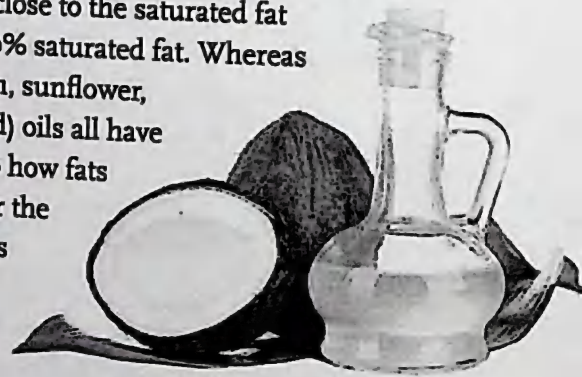
Below is a simple summary showing properties of oils for their use as condiments. Many of these have low smoke points and can easily be oxidized by heat. Raw and cold pressed is best. VPK implies conducive for all three *dosha* types, Vāta (V), Pitta (P) as well as Kapha (K); whereas PK implies alright for Pitta and Kapha; so on and so forth.

Olive oil	VPK (especially good for Pitta)
Walnut oil	warming, VPK (in moderation for Pitta)
Hemp seed oil	light, anti-inflammatory, VPK (especially good for Pitta)
Pistachio oil	neutral VPK
Pumpkin seed oil	warming, anti-inflammatory, bone-building, VPK (in moderation for Pitta)
Golden flax oil	light, cool, PK (especially good for Kapha)
Macadamia nut oil	heavy, cool, VP (rarely use for Kapha)

⇒ Coconut oil is cooling

Pressing (ideally cold-pressing) the meat of the coconut yields the oil that is outstanding in many ways. At moderate room temperatures, coconut oil often forms a solid fat like butter. When heated in a nonreactive pan or skillet, it melts, but its composition remains stable at high temperatures making it an ideal fat for high heat cooking. Coconut oil is heavy and cooling, suitable for all three *dosha*; and is recommended to be used in moderation for Kapha type unless supplemented by the ghee, which is much lighter.

What is remarkable about coconut oil is its high saturated fat content of around 90%. Saturated fat is stable at high temperatures whereas unsaturated fat can easily become oxidized. One other vegetable oil that comes close to the saturated fat content of coconut oil is palm kernel oil with about 50% saturated fat. Whereas other popular cooking oils such as soybean, olive, corn, sunflower, flaxseed, safflower and canola (also known as rapeseed) oils all have 15% or less saturated fat. The chain length is critical to how fats are digested and longer chain fats are much harder for the body to digest. Coconut is high in saturated fat but this particular fat is high in medium chain triglycerides, which are considered beneficial for a healthy diet.



⇒ Mustard oil is fiery

While pure ghee is known as the primary golden liquid of life, pure mustard oil is known as the secondary golden liquid of life. For one thing, mustard oil has an ideal omega-6 to omega-3 ratio of about 2:1. Most of the vegetable oils that are popular in the modern diet are extremely high in omega-6 while low in omega-3. Oils rich in inflammatory omega-6 may be diminishing brain function. Consumption of oils rich in omega-3 is deemed necessary to counterbalance the detrimental effects of a high consumption of omega-6 through oils.

Even though mustard oil can be used for cooking at higher temperatures, Ayurveda recommends mustard oil to be used in moderation when cooking during the summer months because of its ability to provoke the Pitta *dosha*. An exception is in the cold winter months when some boost to the digestive fire is desirable. Therefore, the Ayurvedic notion of choosing food ingredients based on *dik* (direction with respect to the origin of the harvest) and *kāla* (seasonal timing) are very applicable in the case of mustard oil because of its heating properties. Mustard oil remains ranked lower than coconut oil as the choice of cooking oil unless its fiery nature is preferred for some reason. For example, the traditional antidote to create balance by inducing heat and taste would often be to use raw cold-pressed mustard oil in steamed foods, especially in colder climates. In contrast, coconut oil has cooling properties and pacifies both Vāta and Pitta and does not provoke Kapha *dosha* when used in moderation.

☞ We are coconut heads!

Fruits and vegetables have a subtle way of mimicking human forms. Ayurveda deems them to be the co-evolved counterparts in nature of parts of the human body. A classic example is the kidney bean which is named after the organ it resembles. Nature seems to give subtle clues about the benefits or curative effects of certain plants and herbs, which is known as the doctrine of signatures.

So what about the coconut? With pride of place on Indic worship altars, the coconut has represented the human head for centuries, both in Vedic temple rituals as well as in Atharvaveda teachings. It is ceremonially cracked open by priests as an offering and to represent the transcendence of egoism and egotism. Inside the rough and hard exterior is revealed the soft white meat of the coconut symbolizing pure light. Most coconuts have three dark spots on the outside resembling the two physical eyes and the mouth. At the back of the coconut is a tuft of fibrous hair that corresponds to a sensitive point at the back of the human skull just above the occipital protuberance known in Sanskrit as the *shika*. This point is situated exactly opposite the midpoint of the two eyebrows at the back of the head and is flanked by the posterior fontanelle above and the medulla below. Priests in India sometimes shave their heads but leave a few locks of hair at this *shika* point, resembling the tuft of a coconut. The entire area is known as the “zone of occiput” deemed especially important in *prāṇāyāma* and meditation techniques.

The coconut mirrors the brain in other subtle ways. The coconut water is close in composition to cerebrospinal fluid carrying the *prāṇa*, the vital life force along the spine. Drinking fresh coconut water is a good way to revitalize *prāṇic* electrolytic balance as well as enriching the ventricular fluid. In Sanskrit, the coconut is known as *kalpavriṣa*, which means “the tree that supplies all that is needed to live”. Nowadays in the West, nutritionists are realizing why this fruit tree was given such a name in ancient times. The coconut has been the mainstay as a primary fruit in Ayurveda with many health benefits ranging from boosting brainpower to improving immunity.

❧ *Cholesterol for functional memory*

Cholesterol is essential for the functioning of the body. In fact, one can't live without it. The body produces its own cholesterol and the majority of the cholesterol present in the body will have been made internally. Nevertheless, one still needs to source some of the cholesterol from food. Cholesterol is a Kapha molecule as per Ayurvedic classification. Ayurveda has harboured a balanced view of cholesterol.

We can briefly relate with the modern scientific perspective. Not all cholesterol is 'bad.' Low-density lipoprotein (LDL) cholesterol is generally considered to be detrimental to health whereas high-density lipoprotein (HDL) cholesterol is considered to be the 'good' type of cholesterol. When coconut is eaten regularly, the HDL or good cholesterol tends to increase. About a quarter of the cholesterol in the body is present in the brain. There are benefits for the brain from good cholesterol. Ayurvedic tradition links higher good cholesterol in the blood with better memory, and modern scientific studies are beginning to concur. For example, the benefit of coconut oil for improving dementia is no surprise to Ayurveda.

Total cholesterol counts can be misleading and high cholesterol levels need not necessarily sound alarm bells. It is important to look at the proportion of the total cholesterol that consists of HDL. One need not avoid high quality oils and fats containing saturated fat such as coconut oil and pure ghee (containing about two-thirds saturated fat). It is best to evaluate their use based on Ayurvedic wisdom and other balancing effects from exercise through yogic and *prāṇic* lifestyle.

❧ *Ketone bodies fuel the brain*

There are only very few good sources of ketogenic fats in nature and the coconut is a prime one. These medium chain fatty acids in coconut oil are metabolized differently from other fats as they break down directly into ketones in the liver. Both glucose and ketones are sources of energy for the brain but ketone bodies have special qualities conducive to a healthy brain.

Indeed, a ketogenic diet (high in ketogenic fats and low in carbohydrates) has been well documented for almost a century as a way to treat epileptic seizures. In the same way, fasting has also been used for centuries as a treatment for epilepsy. The ketones produced during fasting can have a healing effect on the brain.

❧ *In praise of lauric acid*

One specific medium chain fatty acid is noteworthy in the coconut – lauric acid. It is only found in tropical vegetable oils and not in oils from vegetables grown in temperate climates. About half or more of the fat content of coconut oil consists of lauric acid.

Lauric acid is converted into monolaurin in the body and has the ability to fight bacterial infections, fungal and viral infections. Breast milk is rich in monolaurin, which could explain why it affords so much immunity to the growing baby.

The milk and meat of the coconut contain lauric acid but by far the highest amount is found in the oil. Therefore, coconut oil provides a plentiful supply of lauric acid allowing the body to produce monolaurin with all its potentially healthful protection.

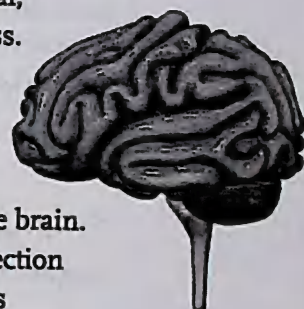
❧ Fat for thought

Modern science lumps ghee and oils together with adipose tissue as fats. Ayurveda takes a deeper perspective. Most of the oils except coconut oil and castor oil are heating. Ghee has a *virya* that is cooling. Due to the *shita-virya* (cooling potency during digestion), ghee and coconut oil bear special significance in Ayurveda. A measured combination of coconut oil and ghee is useful as a *sneha* or special dietary fat that is strength-giving and effectively controls Vāta aggravation.

As the brain is largely made up of fats, high quality fats in the diet are essential, otherwise the brain's memory centres can shrink or lose some of their prowess. Good sources of fats with the right fat composition for brain sustenance are provided by coconut oil and pure ghee. The Ayurvedic lesson is not to starve the brain of high quality fats!

A high quality fat that is ideal for the seat of *agni* is deemed remarkable for the brain. Ayurveda deems 'gut feeling' to be equated with brain clarity. The gut is a reflection of the brain and therefore a leaky gut might indicate the possibility of a porous blood-brain barrier. The brain and small intestine are considered similar evolutes that resemble each other in structure, packing and folding. The brain is encased and restricted while the small intestine can float and unravel. Inflammation in the gut is considered the source of diseases and can be especially detrimental to brain function.

It is an Ayurvedic culinary tradition to serve steamed fermented foods garnished with high quality ghee. The traditional home kitchen regime of Ayurveda has incorporated the combination of high quality fat with fermented food. Grandma's cooking emphasizes the regular use of such a special combination to keep the brain clear! Such practical wisdom is very reassuring. The primary goal herein is that of promoting a healthy milieu of friendly gut bacteria. Ayurvedic wisdom has been emphasizing the communication of the gut (microbes) with the brain all along. Naturally, this Sanskrit-based tradition is replete with guidance on the source of illnesses and the link between intestinal flora and the brain. Ayurveda attributes most diseases to a dysfunctional intestinal ecosystem. Ingesting probiotic foods has been part of a daily ritual in most parts of Indic culture where Ayurveda has survived. Steamed fermented delicacies rich in protein served with freshly made coconut-cilantro chutney and garnished with ghee epitomize the teachings of this practical wisdom. No wonder the optimal use of high quality fats especially in warm liquid form as an offering to the *agni* (digestive fire) has been deemed sacred.





Scalability of Recipes

While following recipes, it is easy to be daunted if the recipe is not for the number of people to be served. An encouraging feature of Ayurvedic cooking resides in the scalability of cooking ingredients and tempering ingredients. While cup and tablespoon (Tbsp) measurements can be easily scaled up or down, teaspoon (tsp) measurements can be scaled down by using large pinch or tiny pinch using two or three fingers together, with some practice of course. Even the spice blends can be made ahead of time in fairly large amounts and stored. In Ayurvedic cooking, feelings from smell and colours are more relied upon rather than exact measurements. Using the palm of the hand and finger pinches for measuring are enough for an experienced cook when complementing the ingredients in order to balance the soup. As long as the method of balancing the six tastes with spices and special ingredients is understood, it is a good starting point. Some useful formulae for scalability of measurements are reproduced below (in US units).

3 tsp = Tbsp

16 two finger pinches = 1 tsp

$\frac{1}{4}$ cup = 4 Tbsp

8 three finger pinches = 1 tsp

$\frac{1}{2}$ cup = 8 Tbsp

8 oz = 1 cup

32 oz = 1 qt

34 oz = 1 L

1 cup = 16 Tbsp

16 oz = 1 pint

4 qt = 1 gal

1 gal = $3\frac{3}{4}$ L

Note

Ayurvedic recipes are often perfected by cooking for a large number; such is the case for many of the recipes in this workbook. Therefore, the following recipes will most likely need to be scaled down for home cooking. Please note that a serving of 2 cups is usually sufficient to satiate one person.



Simple Spice Mix

The simple spice mix is a basic blend for everyday Ayurvedic cooking. The blend can be added to soups, curries, vegetables, porridges and other dishes.

Ingredients

4 cups whole coriander seeds	1 cup turmeric powder
1 cup cumin seeds	1 Tbsp black mustard seeds (optional)
½ cup fennel seeds	2 dozen individual dry curry leaves (optional)
¼ cup fenugreek seeds	

Directions

Mix all ingredients well and grind, preferably with a stone grinder (stone grinding retains higher *prāna*). Store in an air-tight glass jar to retain potency and freshness. This spice mix can be scaled up if storing in larger jars or needing larger amounts.

Note

Freshly grated ginger should be used whenever possible as per the individual recipe. Similarly fresh turmeric roots can be grated in addition to the turmeric powder already included in the Simple Spice Mix.

Additional Common Spice Mixes

Garam masala is a mix of ground spices: cinnamon stick, cardamom pod, clove bud (bulb on top removed), nutmeg, black peppercorn, bay leaf, and cumin seed. The *garam masala* mix is used separately during cooking or at the end during tempering. Typically a teaspoon to a tablespoon is used during regular cooking as per the individual recipes.

Panch phoran is a mix of five whole spices: *kalonji* (nigella) seed, fenugreek seed, fennel seed, cumin seed and *radhuni* fruit. *Radhuni* is a specific spice from Eastern India and due to its rarity it is often replaced by mustard seeds in this mix. *Panch phoran* mix is used during the tempering phase only as per the individual recipes.

Black *kalonji* seeds (*nigella sativa*) have a pungent bitter taste. *Kalonji* is carminative and increases the curative power of the body. Classified as part of *Renunculcea* family, this abundant plant in India bears star-shaped flowers with black granules of nigella seeds at the top of the calyx. *Kalonji* oil is much sought after and provides a rich supply of polyunsaturated fatty acids.

Radhuni is a flowering plant in the *Apiaceae* family. It is a tiny dried fruit, similar in appearance to the *ajwain* (carom) seed. This strong spice has a smell similar to parsley and a taste similar to celery. Known for its carminative properties, it is rarely found outside of Eastern India.



Roasted Spice Mix

The roasted spice mix can be added to soups, curries, vegetables, porridges and other dishes. It brings about a distinctive flavor, and adds body and thickness to the dish. A tsp or Tbsp of this roasted spice mix can be used while tempering at the end, even when the simple spice mix (unroasted) has been used during the main cooking phase. The roasted spice mix is distinct from the simple spice mix and other non-roasted spice blends, such as *garam masala* and *panch phoran*.

Ingredients

- | | |
|---|---|
| 1 cup split yellow chickpeas
(<i>chana</i> lentil) | ¼ cup fenugreek seeds |
| 1 cup split yellow pigeon peas
(<i>toor</i> or <i>tuvar</i> lentil) | 1 cup cumin seeds |
| ¼ cup split & husked black
Bengal gram (<i>urad</i> lentil) | ½ cup fennel seeds |
| ¼ cup heirloom raw rice | 1 cup turmeric powder |
| 4 cups whole coriander seeds | 1 Tbsp black mustard seeds (optional) |
| | 2 dozen individual dry curry leaves
(optional) |

Directions

Dry roast each lentil and rice individually on low heat. Lentils should be of pinkish or brownish color when ready. Mix and set aside. Dry roast the mustard seeds (if using them) over low medium heat. If seeds begin to pop, remove from flame promptly. Mildly dry roast the cumin seeds, fennel seeds and fenugreek seeds together. Thereafter, roast the coriander seeds on low heat in a thick bottom pan for a few minutes until there is a roasted aroma. Do not let the seeds turn brown in color. The idea is to roast the seeds just enough to remove any residual moisture. Herein, add curry leaves while roasting.

Mix all roasted ingredients and dry grind them together (stone grinding retains higher *prāna*). Add the turmeric powder and mix thoroughly to combine. Store in an air-tight glass jar to retain potency and freshness. This spice mix can be scaled up if storing in larger jars or needing larger amounts.



Split Black-eyed Peas with Golden Beet and Parsnip

48 servings of one cup

Prep time ~ 100 minutes

Cooking time ~ 60 minutes

Cooking Ingredients

- | | |
|--|--|
| 8 cups split black-eyed peas (<i>chora</i> lentil) | 2 dozen medium-sized golden beets |
| 48 cups water | 2 dozen large parsnips |
| 1 Tbsp <i>ajwain</i> (carom) seeds (crushed by thumb in your palm) | ¼ cup salt |
| 1½ cups roasted spice mix (or simple spice mix) | 6 – 8 cups freshly grated coconut (from 2 whole coconuts, cored) |
| 1 Tbsp (flat) <i>garam masala</i> | ¼ cup neem flowers (garnish) |
| 1 cup freshly grated ginger | 2 bunches parsley, chopped |
| ½ cup shaved date jaggery | 2 bunches cilantro, chopped |

Tempering Ingredients

- | | |
|---|---------------------------|
| ¼ cup coconut oil | ¼ cup <i>panch phoran</i> |
| 2 Tbsp ghee | 1 tsp <i>garam masala</i> |
| 2 Tbsp split & husked black Bengal gram (<i>urad</i> lentil) | 2 dozen curry leaves |

Prep Directions

Take extra care scrubbing and washing the beets and parsnips. Cut out and separate the beet greens as they are not used for this soup. No need to peel them; just core or cut out bad spots! Cut these roots into at least one inch pieces. Even 1½ inch pieces are fine if only adults are eating.

Cooking Directions

Place lentil in the pressure cooker, rinse and drain. Add 24 cups of water. Add the freshly crushed *ajwain* (carom) seeds; crushed in your palm is okay. Cover, seal and bring to pressure. Once up to pressure, reduce flame to low and cook for about 15 minutes. Turn off and release pressure and open the cooker. The lentil should be soft and somewhat blended. Transfer the lentil contents to a large covered pot. Add the remaining 24 cups of water and bring to boil over low-medium heat. Once gently boiling, add the spice mix and *garam masala* powder and the freshly grated ginger. Keep stirring occasionally to mix the spices (check for lumps) over light boil. Add the golden beets and cook for another 10 minutes or until beets are half-cooked. Add the parsnips, cook for 5 more

minutes. Add date jaggery and salt, stir and continue to gently boil for about 5 minutes or so. Add the freshly grated coconut and gently stir in. When parsnips become softer, turn flame to low and simmer (very gentle boil). Do not overcook the parsnips!

While the soup is simmering, heat the coconut oil (and then ghee) in a skillet over low to medium heat. Add the *urad* lentil and sauté for a few minutes and then add the *panch phoran*. Let the mix sizzle. Add *garam masala*. Gently temper over low heat until the spices are fragrant. When both the spices and the lentil have turned lightly brown, add the curry leaves. Fresh curry leaves might cause splattering. For a few seconds, hold an empty bowl on top of the skillet to contain the splatter. Immediately add the contents of the skillet (tempered spices and oil) to the soup. Let the sizzling settle and then stir to mix. Simmer for a few more minutes. Thereafter, add the neem flowers to the soup as a garnish. Let the neem flowers disperse for a minute or two. Turn off flame and add the cilantro and parsley to the surface of the soup. Gently stir before serving.



Split Black-eyed Peas with Tahitian Squash and Chidori Kale

48 servings of one cup

Prep time ~ 100 minutes

Cooking time ~ 45 minutes

Cooking Ingredients

- | | |
|--|---|
| 8 cups split black-eyed peas (chora lentil) | 1 ½ cup roasted spice mix
(or simple spice mix) |
| 48 cups water | 1 Tbsp (flat) <i>garam masala</i> |
| 1 Tbsp <i>ajwain</i> (carom) seeds
(crushed by thumb in your palm) | 1 cup freshly grated ginger |
| 6 quarts (using 1 quart measure)
equivalent to 24 cups of Tahitian
squash, unpeeled, cut in 1 ½ inch
squares or wedges | 1 Tbsp shaved date jaggery |
| 6 quarts (using 1 quart measure)
equivalent to 24 cups of cleaned
and washed chidori purple-kale (big
pieces split in half) | ¼ cup salt |
| | 6 – 8 cups freshly grated coconut
(from 2 whole coconuts, cored) |
| | ¼ cup neem flowers (optional) |
| | 1 bunch cilantro, chopped |
| | 1 bunch parsley, chopped |

Tempering Ingredients

- | | |
|--|---------------------------|
| ¼ cup coconut oil | ¼ cup <i>panch phoran</i> |
| 2 Tbsp ghee | 1 tsp <i>garam masala</i> |
| 2 Tbsp split & husked black Bengal gram
(<i>urad</i> lentil) | 2 dozen curry leaves |

Prep Directions

Take extra care while washing the purple kale thoroughly. Using your hands, break the stems right at the root of the leaf and set aside the stems. Bigger pieces of kale can be broken or torn in half; there is no need to use knives! Do not peel the Tahitian squash; simply scrub and wash. Cut off the stem portion and cut perpendicular to the length into 1 ½ inch wide discs. The seeds can be removed for future roasting. The stringy flesh inside the squash should be retained for cooking. Thereafter cut into wedges or squares. Except the cut small stem of the squash, all other ingredients can be used.

Cooking Directions

Place lentil in the pressure cooker, rinse and drain. Add 24 cups of water. Add the palm-rubbed/crushed *ajwain* (carom) seeds. Cover, seal and bring to pressure. Once up to pressure, reduce flame to low and cook for about 15 minutes. Turn off and release pressure and open the cooker. The lentil should be soft and somewhat blended. Transfer

the lentil contents to a large covered pot. Add the remaining 24 cups of water and bring to boil over low-medium heat. Once gently boiling, add the spice mix and *garam masala* powder and the freshly grated ginger. Keep stirring occasionally to mix the spices (check for lumps) over light boil. Add the Tahitian squash and cook for another 10 minutes. Add date jaggery and salt, stir and continue to simmer for about 10 minutes or until the squash is nearly cooked (the pieces should not melt). Add the coconut and kale. Stir and simmer for another 5 minutes.

While the soup is simmering, heat the coconut oil (and then ghee) in a skillet over low to medium heat. Add the *urad* lentil and sauté for a few minutes and then add the *panch phoran*. Let the mix sizzle. Add *garam masala*. Gently temper over low heat until the spices are fragrant. When both the spices and the lentil have turned lightly brown, add the curry leaves. Fresh curry leaves might cause splattering. For a few seconds, hold an empty bowl on top of the skillet to contain the splatter. Immediately add the contents of the skillet (tempered spices and oil) to the soup. Let the sizzling settle and then stir to mix. Simmer for a couple of minutes. Thereafter, add the neem flowers to the soup as a garnish. Let the neem flowers disperse for a minute or two. Turn off flame and add the cilantro and parsley to the surface of the soup. Gently stir before serving.



Green Split Mung Lentil with Pumpkin and Radish

48 servings of one cup

Prep time ~ 100 minutes

Cooking time ~ 45 minutes

Cooking Ingredients

- | | |
|---|--|
| 8 cups un-husked green split <i>mung</i> lentil | 1 Tbsp (flat) <i>garam masala</i> |
| 48 cups water | 1 cup (packed) freshly grated ginger |
| 1 Tbsp <i>ajwain</i> (carom) seeds (crushed by thumb in your palm) | ½ cup freshly grated turmeric root (if available) |
| 6 quarts (using 1 quart measure) equivalent to 24 cups of pumpkin unpeeled, cut in 1½ inch pieces | 1 Tbsp shaved date jaggery (optional) |
| 6 quarts (using 1 quart measure) equivalent to 24 cups of daikon radishes cut into 1½ inch pieces | ¼ cup salt |
| 1½ cups roasted spice mix (or simple spice mix) | 6 – 8 cups freshly grated coconut (from 2 whole coconuts, cored) |
| | 2 Tbsp neem flowers (optional) |
| | 2 bunches parsley, chopped |
| | 2 bunches cilantro, chopped |

Tempering Ingredients

- | | |
|---|---------------------------|
| ¼ cup coconut oil | 1 tsp <i>garam masala</i> |
| 2 Tbsp ghee | ¼ cup <i>panch phoran</i> |
| A pinch of crushed asafoetida (optional) | 2 dozen curry leaves |
| 1 Tbsp husked yellow split chickpeas (<i>chana</i> lentil) | |

Prep Directions

Scrub and wash the vegetables. Cut out most of the daikon greens as they are not used for this soup; a small portion of the daikon greens can be retained as long they are cleaned. There is no need to peel either vegetable except at a few spots! Cut both the pumpkin and the radish into at least one inch pieces (squares, wedges, triangles etc.). Even 1½ inch pieces are fine if only adults are eating.

Cooking Directions

Place lentil in the pressure cooker, rinse and drain. Add 24 cups of water. Add the freshly crushed *ajwain* (carom) seeds; crushed in your palm is okay. Cover, seal and bring to pressure. Once up to pressure, reduce flame to low and cook for about 10 minutes. Turn off and release pressure and open the cooker. The lentil should be soft and somewhat blended. Transfer the lentil contents to a large covered pot. Add the remaining 24 cups

of water and bring to boil over low-medium heat. Once gently boiling, add the spice mix and *garam masala* powder and the freshly grated ginger. Add the freshly grated turmeric root (if available). Keep stirring occasionally to mix the spices (check for lumps) over light boil. Add the pumpkin and cook for 5 minutes (to soften the skin). Add the radish and cook for 10 minutes or until the vegetables are half-cooked (not quite soft). Add salt (plus date jaggery, if using) and cook for 10 more minutes with gentle boiling. Add freshly grated coconut and disperse. Turn flame to low and simmer (very gentle boiling). Do not overcook the pumpkin!

While the soup is simmering, heat the coconut oil (and then ghee) in a skillet over low to medium heat. When the oil is hot, first add the asafoetida and let it sizzle! If the oil is not hot, then sizzling will not happen. Add the *chana* lentil and sauté for a few minutes and then add the *panch phoran*. Let the mix sizzle. Add *garam masala*. Gently temper over low heat until the spices are fragrant. When both the spices and the lentil have turned lightly brown, add the curry leaves. Fresh curry leaves might cause splattering. For a few seconds, hold an empty bowl on top of the skillet to contain the splatter. Immediately add the contents of the skillet (tempered spices and oil) to the soup. Let the sizzling settle and then stir to mix. Simmer for few more minutes. Thereafter, add the neem flowers to the soup as a garnish. Let the neem flowers disperse for a minute. Turn off flame and add the cilantro and parsley to the surface of the soup. Gently stir before serving.



Yellow Split Mung Lentil with Lacinato Kale and Goji Berries

48 servings of one cup

Prep time ~ 60 minutes

Cooking time ~ 40 minutes

Cooking Ingredients

- | | |
|--|--|
| 8 cups husked yellow split <i>mung</i> lentil | 1 cup freshly grated ginger (packed) |
| 48 cups water | ½ cup freshly grated turmeric root (if available) |
| 1 Tbsp <i>ajwain</i> (carom) seeds (crushed by thumb in your palm) | ½ cup shaved date jaggery |
| 8 bunches Lacinato dinosaur kale, leaves halved (about 150 pieces) | ¼ cup salt |
| 1 ½ cup goji berries | 6 – 8 cups freshly grated coconut (from 2 whole coconuts, cored) |
| 1 ½ cups roasted spice mix (or simple spice mix) | 1 bunch cilantro, chopped |
| 1 Tbsp (flat) <i>garam masala</i> | 1 bunch parsley, chopped |

Tempering Ingredients

- | | |
|---|---------------------------|
| ¼ cup coconut oil | 1 tsp <i>garam masala</i> |
| 2 Tbsp ghee | ¼ cup <i>panch phoran</i> |
| A pinch of crushed asafoetida (if available) | 2 dozen curry leaves |
| 1 Tbsp husked yellow split chickpeas (<i>chana</i> lentil) | |

Prep Directions

Take extra care while washing the dinosaur kale thoroughly. Break with hands the stems right at the root of the leaf and set aside the stems to be added into the soup. Each big piece of kale can be broken or torn in half; there is no need to use knives!

Cooking Directions

Place lentil in the pressure cooker, rinse and drain. Add 24 cups of water. Add the freshly crushed *ajwain* (carom) seeds; crushed in your palm is okay. Cover, seal and bring to pressure. Once up to pressure, reduce flame to low and cook for about 10 minutes. Turn off and release pressure and open the cooker. The lentil should be soft and somewhat blended. Transfer the lentil contents to a large covered pot. Add the remaining 24 cups of water and bring to boil over low-medium heat. Once gently boiling, add the spice mix and *garam masala* powder and the freshly grated ginger (and freshly grated turmeric).

Keep stirring occasionally to mix the spices (check for lumps) over light boil. Add the date jaggery and cook with low boil for 5 minutes. Add and stir in kale and simmer 5 minutes; let the kale break in a little bit. Add salt and thereafter, add the goji berries and disperse. Then add the freshly grated coconut and let it remain spread on top and simmer for a couple of minutes covered. Open lid and stir in the freshly grated coconut to blend in with the soup. The kale should look a bursting green colour.

While the soup is simmering, heat the coconut oil (and then ghee) in a skillet over low to medium heat. When the oil is hot, first add the asafoetida and let it sizzle! If the oil is not hot, then sizzling will not be visible. Add the *chana* lentil and sauté for a few minutes and then add the *panch phoran*. Let the mix sizzle. Add *garam masala*. Gently temper over low heat until the spices are fragrant. When both the spices and the lentil have turned lightly brown, add the curry leaves. Fresh curry leaves might cause splattering. For a few seconds, hold an empty bowl on top of the skillet to contain the splatter. Immediately add the contents of the skillet (tempered spices and oil) to the soup. Let the sizzling settle and then stir to mix. Simmer for a couple of minutes. Turn off flame and add the cilantro and parsley to the surface of the soup. Gently stir before serving.



Green Split Mung Lentil with Curly Kale and Goji Berries

48 servings of one cup

Prep time ~ 60 minutes

Cooking time ~ 40 minutes

Cooking Ingredients

8 cups split green gram (unhusked split green *mung* lentil)

48 cups water

1 Tbsp *ajwain* (carom) seeds (crushed by thumb in your palm)

8 bunches curly kale, larger leaves halved (not using purple kale or dinosaur kale)

1 ½ cups goji berries

1 ½ cups roasted spice mix (or simple spice mix)

1 Tbsp (flat) *garam masala*

1 cup freshly grated ginger (packed)

½ cup freshly grated turmeric root (if available)

½ cup shaved date jaggery

¼ cup salt

6 – 8 cups freshly grated coconut (from 2 whole coconuts, cored)

1 bunch cilantro, chopped

1 bunch parsley, chopped

Tempering Ingredients

¼ cup coconut oil

2 Tbsp ghee

A pinch of crushed asafoetida (if available)

1 Tbsp husked yellow split chickpeas (*chana* lentil)

1 tsp *garam masala*

¼ cup *panch phoran*

2 dozen curry leaves

Prep Directions

Take extra care while washing the curly kale thoroughly. Break with hands the stems right at the root of the leaf and set aside the stems to be added into the soup. Each big piece of kale can be broken or torn in half; there is no need to use knives!

Cooking Directions

Place lentil in the pressure cooker, rinse and drain. Add 24 cups of water. Add the freshly crushed *ajwain* (carom) seeds; crushed in your palm is okay. Cover, seal and bring to pressure. Once up to pressure, reduce flame to low and cook for about 10 minutes. Turn off and release pressure and open the cooker. The lentil should be soft and somewhat blended. Transfer the lentil contents to a large covered pot. Add the remaining 24 cups of water and bring to boil over low-medium heat. Once gently boiling, add the spice mix and *garam masala* powder and the freshly grated ginger (and freshly grated turmeric). Keep stirring occasionally to mix the spices (check for lumps) over light boil. Add the date

jaggery and cook with low boil for 5 minutes. Add and stir in kale and simmer 5 minutes; let the kale break in a little bit. Add salt and thereafter, add the goji berries and disperse. Then add the freshly grated coconut and let it remain spread on top and simmer for a couple of minutes covered. Open lid and stir in the freshly grated coconut to blend in with the soup. The kale should still be bursting with colour.

While the soup is simmering, heat the coconut oil (and then ghee) in a skillet over low to medium heat. When the oil is hot, first add the asafoetida and let it sizzle! If the oil is not hot, then sizzling will not be visible. Add the *chana* lentil and sauté for a few minutes and then add the *panch phoran*. Let the mix sizzle. Add *garam masala*. Gently temper over low heat until the spices are fragrant. When both the spices and the lentil have turned lightly brown, add the curry leaves. Fresh curry leaves might cause splattering. For a few seconds, hold an empty bowl on top of the skillet to contain the splatter. Immediately add the contents of the skillet (tempered spices and oil) to the soup. Let the sizzling settle and then stir to mix. Simmer for a couple of minutes. Turn off flame and add the cilantro and parsley to the surface of the soup. Gently stir before serving.



Kidney Bean Rajma with Buttermilk

36 servings of one cup

Prep time ~ 30 minutes (plus overnight soaking)

Cooking time ~ 90 minutes

Cooking Ingredients

- | | |
|--|---|
| 8 cups of dried red kidney beans
(immersing in warm water overnight
yields about 18 cups of soaked kidney
beans after draining the water) | 1 Tbsp turmeric powder or ¼ cup freshly
grated turmeric root |
| 14 cups of water for pressure cooking | ¼ cup shaved jaggery (optional) |
| 1 Tbsp crushed <i>ajwain</i> | ¼ cup salt (if buttermilk is unsalted,
otherwise 2 Tbsp is enough) |
| 1 tsp <i>garam masala</i> | 4 cups of freshly grated coconut |
| ½ cup simple spice mix | 4 bunches parsley, chopped |
| ½ cup freshly grated ginger | 4 cups unsalted <i>real</i> buttermilk |
| | 2 Tbsp neem flowers (optional) |

Tempering Ingredients

- | | |
|--|----------------------------|
| 3 Tbsp coconut oil | 2 Tbsp <i>panch phoran</i> |
| 3 Tbsp ghee | 1 tsp <i>garam masala</i> |
| A pinch of crushed asafoetida (optional) | 2 dozen curry leaves |
| 1 Tbsp split <i>chana</i> lentil | |

Prep Directions

Soak 8 cups of kidney beans overnight, completely immersing in warm water. Note that 8 cups of kidney beans typically become 18 to 20 cups (usually 2¼ to 2½ times more) when soaked overnight. Drain the water before pressure cooking.

Cooking Directions

Place the soaked kidney beans in the pressure cooker with 14 cups of water for pressure cooking. Add the *ajwain*. Cover, seal and bring to pressure (can take 30 to 40 minutes). Once up to pressure, reduce flame to low, cook for about 25 minutes to half an hour. Turn off, release pressure and open the cooker. The beans should be soft but still retain their form.

Pour the entire contents of the pressure cooker (water and beans) into a large nonreactive pot. Start cooking over low-medium flame and bring to boil. From here onwards until turning off the flame, cooking should take less than half an hour. Once gently boiling, add the spice mix and *garam masala* powder. Add the ginger and turmeric. Gently stir. Add date jaggery shavings followed by salt. Gently stir to dissolve the salt uniformly. Then add freshly grated coconut followed by the neem flowers. Stir the contents without breaking the beans. Now we are ready for the tempering phase.

While the beans are simmering, heat the coconut oil (and then ghee) in a nonreactive skillet over medium heat. When the oil is hot, first add the asafoetida and let it sizzle! Add the *chana* lentil and sauté for a minute or two, and then add the *panch phoran*. Thereafter, add *garam masala* and temper over low heat for a few minutes until the spices are fragrant. Next add the curry leaves. Cover to protect from splattering. Immediately add the contents of the skillet into the cooked bean pot. Simmer for a couple of minutes with gentle stirring. Turn off flame. Add chopped parsley and gently disperse. Lastly, add the buttermilk and mix. Let it sit for a couple of minutes. A yummy creamy kidney bean soup is ready to serve.

Note

The trick with this recipe is to add the same amount of water plus buttermilk to the total amount of soaked kidney beans. Thus, it might be useful to measure the total amount of kidney beans after overnight soaking. Typically, the beans expand by $2\frac{1}{4}$ to $2\frac{1}{2}$ times upon soaking. Buttermilk can be homemade by adding a small amount of buttermilk starter culture to high quality whole milk (at least at 25°C or 77°F) and bottle it covered on a countertop with a cheese cloth for 24 hours, stirring or swivelling periodically. Once fermented, refrigerate buttermilk in a capped bottle until use. Use of buttermilk is a traditional antidote to facilitate digestion and gives the kidney bean soup a rounded flavour. Buttermilk is usually added at the end when the soup is taken off flame. When using commercially available salted buttermilk, the amount of cooking salt needs to be reduced proportionately.



Khitchari with Grain and Lentil

Generous serving for 8 adults

Prep time ~ 60 minutes

Cooking time ~ 45 minutes

Ingredients

- | | |
|--|---|
| 1 cup split green gram (husked split yellow or split green <i>mung</i> lentil) | 1 – 2 Tbsp ghee |
| 1 cup rice (white or brown) or quinoa or millet | 4 – 6 cups seasonal vegetables cut into 1 inch pieces (squares or wedges) |
| 8 cups water (4 times the amount of rice and lentils is usual) | Kale torn into smaller pieces (optional) |
| 1 tsp or a pinch <i>ajwain</i> (carom) seeds | 1 Tbsp sea salt |
| ¼ cup simple spice mix | 1 cup freshly grated coconut |
| 2 Tbsp freshly grated ginger | 1 small bunch cilantro |
| | 1 small bunch parsley |

Directions

Soak the lentil and freshly crushed (palm-rubbed is okay) *ajwain* (carom) seeds for 15 minutes in hot water. Drain water and rinse lentil. Gently rinse and drain rice. In a thick-bottom pot that is meant to cook for at least 10 people, combine the rice, lentils, and water, and bring to a gentle boil. Add the ghee and stir to combine; thereafter add all the spices, including ginger. Cook about halfway (until the lentils and rice have softened and half the water is absorbed). Add the vegetables and salt and cook until the vegetables are soft. If using greens (such as kale), add at this time. Add freshly grated coconut and gently stir to disperse. Cook another 5 minutes until semi-watery consistency is achieved. Remove from heat and garnish with chopped parsley and cilantro.

Note

This is a simple dish which is flexible whether complementary vegetables and greens are used or not used at all. Split mung lentil is recommended to be cooked with heirloom grains (quinoa and/or millet can replace rice). However, no wheat or barley is used! Water needs to be slightly adjusted based on the grain, and if using the complementary combination of vegetables. Typically the water is four times the grains and lentils (peas or beans), whenever not using pressure cooking.



Pongal with Brown Rice and Creamy Lentil

48 servings of one cup

Prep time ~ 30 minutes

Cooking time ~ 60 minutes

Ingredients

8 cups split black-eyed peas (<i>chora</i> lentil)	½ cup ghee
40 cups water (3 times for peas plus 2 times for the rice)	1 cup roasted spice mix (or simple spice mix)
8 cups heirloom brown rice (non-sticky kind preferred)	½ cup whole black peppercorns
1 Tbsp <i>ajwain</i> (carom) seeds	¼ cup liquid date jaggery (optional)
	¼ cup sea salt

Directions

Place lentil in the pressure cooker, rinse and drain. Add 24 cups of water. Add the palm-rubbed/crushed *ajwain* (carom) seeds. Cover, seal and bring to pressure. Once up to pressure, reduce flame to low and cook for about 10 minutes (about half-cooked). Turn off and release pressure and open the cooker. Transfer the lentil contents to a large covered pot. Add gently washed and cleaned rice along with remaining 16 cups of water. Cook over low or low-medium flame for 10 more minutes, just enough to soften the rice. Add the rest of the ingredients (black peppercorns, spice mix, ghee, salt, etc). Stir gently and occasionally, and keep cooking for another half an hour or until rice is fully cooked and soft. The consistency will be of a thicker porridge, not watery.



Whole Mung with Coconut

24 servings of one cup

Prep time ~ 40 minutes (plus overnight soaking)

Cooking time ~ 20 minutes

Ingredients

8 cups whole green gram
(unhusked *mung* beans)

12 cups water

2 Tbsp ghee

¼ cup simple spice mix

2 cups freshly grated coconut

2 Tbsp salt

1 bunch cilantro

1 bunch parsley

Directions

Pick through and wash the whole green mung beans and cover fully with hot water in a large bowl to soak overnight (for about 10 hours). Drain the water and rinse once and transfer into a thick-bottom large pot. Add the 12 cups of water and bring to a gentle boil. Add the ghee followed by the simple spice mix and disperse by gentle stirring. Cook for about 10 minutes over low flame; there is no need to cover the pot! When mildly watery, add the salt, stir and simmer for a few minutes. When water is nearly absorbed, add the freshly grated coconut and gently stir, simmer for a few minutes until the water is fully absorbed. Turn off flame. Garnish with finely chopped cilantro and parsley, and gently stir. Serve promptly.

Note

This is a simple dish, but it can be a challenge to retain the mung beans' shape and consistency. Overcooking will result in mishmash. Let the mung beans keep their green colour and vibrancy.



Wholesome Breakfast Meal

6 servings of one cup

Prep time ~ 10 minutes (plus overnight soaking)

Cooking time ~ 20 minutes

Ingredients

2 cups of grain (any of the following:
cream of buckwheat; quinoa flakes;
hulled and cracked sorghum; hulled
and cracked pearl millet; hulled and
cracked/popped finger millet; whole
teff or whole amaranth are also
acceptable for this porridge due to
their small size; small-sized organic
oats can also be used but should
preferably be presoaked, otherwise
steel cut oats are okay)

2 Tbsp ghee (clarified/purified butter) or
raw organic butter

4 – 5 cups water (cracked millets will
need a minimum of 3 times water)

½ cup almonds or cashews (both
presoaked overnight) or halved
walnuts

¼ cup raisins, optional but better to
presoak them too

¼ cup simple spice mix

A pinch of salt (to make it only mildly
salty); 1 tsp (flat) if using millets

2 seasonal apples, cut into small squares

Directions

Sauté the dry grain in ghee or in butter until slightly brown. Pour these contents slowly (not all at once) into hot water and keep stirring to avoid lumping; add and mix the spices immediately. Thereafter, add nuts, apples and/or raisins, and salt. Stir and cook the grain to a semi-watery consistency.

Note

Adding cold water may cause lumps of grain that may not break up easily. Please use hot water. Try to make the hot meal light and fluid-like; avoid making it extra thick. Quantity of dry grain should be based on the number of servings. Ingredients should be procured from reliable well-known organic/ecological sources that are not modified or engineered.



White Rice with Black Sesame Seeds

24 servings of one cup

Prep time ~ 15 minutes

Cooking time ~ 30 minutes

Ingredients

8 cups heirloom white rice
(non-sticky kinds preferred)

¼ cup ghee of high quality

¼ cup whole cumin seeds

1 cup black sesame seeds

20 cups water (roughly 2¼ times water
with respect to rice and sesame)

Directions

Wash and rinse mildly the rice with warm water (don't wash away the vitamins; not necessary for organic, heirloom and clean rice). Pick through and wash the sesame seeds. In a thick-bottom pot, minimum size should be 6 quarts - capable of holding 24 cups of water or more, combine rice, black sesame seeds and water and bring to a gentle boil. Once boiling, stir in the ghee and cumin seeds. When ghee has melted, reduce heat to a simmer and cover pot with a lid. Stir a few times only and continue to simmer over low heat until the rice is soft and all water is absorbed. Avoid burning a layer of rice in the bottom of the pot by way of flame adjustment and periodic stirring.

Note

This is a good stand-alone rice dish for Saturday meals. Saturnian energy is appeased via black sesame seed. As per the Ayurvedic soli-lunar diet, this dish is ideal for Saturdays. Small rice balls from the preparation can be offered to crows or ravens, specifically on Saturdays! Depending on the variety of the rice, water could be more or less than the above ratio; remember to count the cup of sesame seeds in the count. If worms float when rinsing or soaking the rice, then take care in sifting to retain a vegetarian dish!



Red Rice with Black Sesame Seeds

24 servings of one cup

Prep time ~ 15 minutes

Cooking time ~ 60 minutes

Ingredients

8 cups heirloom red rice

1 cup black sesame seeds

23 cups water (roughly 2½ times water
with respect to rice and sesame)

¼ cup ghee of high quality

¼ cup whole cumin seeds

1 tsp *garam masala* (optional)

1 Tbsp sea salt (optional)

2 Tbsp liquid date jaggery (optional)

Directions

Wash and rinse mildly the rice with warm water. Pick through and wash the sesame seeds. In a thick-bottom pot, minimum size should be 6 quarts - capable of holding 24 cups of water or more, combine rice, black sesame seeds and water and bring to a gentle boil. Once boiling, stir in the ghee and cumin seeds. Thereafter add other optional condiments. When ghee has melted, reduce heat to a simmer and cover pot with a lid. Stir a few times only and continue to simmer over low heat until the rice is soft and all water is absorbed. Red rice will usually take longer to cook! Avoid burning a layer of rice on the bottom of the pot by way of flame adjustment and periodic stirring.

Note

This is a good stand-alone rice dish for Saturday meals. Saturnian energy is appeased via black sesame seed. As per the Ayurvedic soli-lunar diet and planetary herbology, this dish is ideal for Saturdays. Small rice balls from the preparation can be offered to crows or ravens, specifically on Saturdays! Depending on the variety of the red rice, water could be more or less than the above ratio; remember to count the cup of sesame seeds in the count. The water ratio is usually higher than in the case of white rice. If worms float when rinsing or soaking the rice, then take care in sifting to retain a vegetarian dish!



Sticky Black Rice on Radicchio

6 servings of one cup

Prep Time ~ 25 minutes

Cooking Time ~ 50 minutes

Ingredients

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|--|--|
| 2 cups of heirloom Thai black rice (gently rinsed) | 2 tsp turmeric powder |
| 6 cups of water | ¼ cup ghee |
| 1 head of radicchio (or a head of romaine lettuce) | 4 tsp salt |
| 1 tsp <i>garam masala</i> | 1 Tbsp shaved date jaggery or liquid date jaggery (optional) |
| ¼ cup simple spice mix | 2 cups of freshly grated coconut |
| ¼ cup freshly grated ginger | 1 Tbsp neem flowers (optional) |

Directions

Place the picked and gently rinsed black rice in a nonreactive heavy bottom cooking pot with cover. Add the water and bring to a boil. Now the entire cooking will be with the lid on. Reduce flame to low heat. Cook for 15 minutes and add the spices in a sequence. Stir to make sure rice is not sticking to the bottom. Add ghee and stir in. Midway into the cooking (about half an hour), add the salt and jaggery (if available). Periodically, stir right to the bottom of the pot thereby gently rotating the contents to prevent rice from sticking and mildly burning. With about ten minutes remaining (rice will be nearly cooked), add the coconut followed by neem flowers (if available). In about 50 to 55 minutes since the initial boil, the rice will be cooked. Turn off flame and keep covered. Ladle the rice onto freshly washed leaves of radicchio. Use romaine lettuce if radicchio is not available. The cooked black rice will sit well inside the leaves. Serve warm.

Note

Depending on the variety of rice, the amount of water needed for cooking varies. Not all varieties of black rice will cook the same way with three times water. It is best to experiment and determine the correct ratio. Plan for an hour of cooking time over low flame whenever cooking black or red rice. Salt can be reduced or not used; and jaggery is optional too. Rice dishes such as these serve as a wholesome meal especially when supplemented by garnished greens or when the rice is served on raw leaves.



Hearty Teff Meal with Lima Beans

18 servings of one cup

Prep Time ~ 15 minutes

Cooking Time ~ 60 minutes

Cooking Ingredients

4 cups teff	2 Tbsp (level) granulated sea salt
12 cups water	1 whole coconut, freshly grated
¼ cup ghee	1 Tbsp liquid date jaggery (optional)
½ cup freshly grated ginger	1 Tbsp freshly ground neem flowers (optional)
¼ cup freshly grated turmeric root (if available)	1 small bunch cilantro, chopped
¼ cup simple spice mix	1 small bunch parsley, chopped
6 cups shelled lima beans (1 lb by weight)	

Tempering Ingredients

1 Tbsp ghee	1 tsp <i>garam masala</i>
1 Tbsp coconut oil	8 – 10 curry leaves
2 Tbsp <i>panch phoran</i>	

Directions

Place the teff into water in a large thick bottom nonreactive cooking pot capable of holding 20+ cups of water. Bring to a gentle boil. Teff will keep spluttering because of its lightness. Keep the pot covered. Periodically, stir right to the bottom of the pot to keep from sticking and clumping. Meanwhile, spluttering will continue. About seven minutes from the start of boiling, add the ghee and mix. Adjust the flame to low-medium in order to avoid rapid thickening of the teff. Thereafter, add all the spices before teff starts to thicken. Add ginger and turmeric followed by the simple spice mix and stir in to avoid clumping. Now, about 15 minutes after the start of boiling, it is time to add the shelled Lima beans. The teff should not become too thick, but just beginning to feel heavy upon stirring. Add salt and jaggery (if available) at this juncture and keep stirring all the way, scraping the bottom. Meanwhile, start the tempering process. Start heating the coconut oil and ghee in a nonreactive skillet over a low flame. Add the coconut and mix well by stirring with both hands. Add the neem flowers (if available) and disperse. The teff will begin to feel thicker at this point in time.

Once the oil for tempering is heated, add *panch phoran* and sizzle. Then add *garam masala* and sizzle for a minute or two. Add all the curry leaves and hold cover on top of the skillet to prevent splattering. The curry leaves should not be fried brownish. As the fragrance is emitting, pour the contents of the skillet into the teff pot and stir vigorously

to mix. The teff should not yet have become too thick to stir! Once the tempered spices are mixed in, turn off flame and disperse the garnishing of chopped cilantro and parsley. The teff will slowly settle and become a thick meal.

Note

Teff is a wonder grain of ancient times. It is usually grouped with prominent millets such as finger millet and foxtail millet. The amount of water needed for cooking teff is at least three times the grain quantity. If not using green vegetables in teff cooking, it works to add $3\frac{1}{2}$ times the water with respect to the amount of teff. Both brown and white varieties make easy-to-digest, light and nutritious meals. Teff porridges without the added vegetables are also delectable. It is recommended that ghee can be replaced by coconut oil or any low heat oil (olive oil will work, for example) to be added to the cooking pot to keep the teff meal from becoming dry and lumpy; note that tempering oil still needs to be a high heat oil.



Whole Millet Bajra

48 servings of one cup

Prep Time ~ 45 minutes

Cooking Time ~ 90 minutes

Ingredients

8 cups whole pearl millet (*bajra*)
28 cups water (3½ times the millet)
3 Tbsp coconut oil
1 Tbsp ghee
2 Tbsp simple spice mix

2 Tbsp freshly grated ginger
1 tsp *garam masala*
1 Tbsp finely shaved or liquid date jaggery (optional)
1 Tbsp salt

Directions

Pick through the pearl millet grains. In the pressure cooker (or a large pot), dry roast the whole millet over medium-high heat until the grains exude an aroma (approx. 10 minutes). Add 24 cups of water. Cover, seal and bring to pressure. Once up to pressure (takes around 10 minutes over high/medium flame), reduce flame to low and cook for at least 1 hour. Turn off and release pressure and open the cooker. The millet should be soft and somewhat glowing! Transfer the contents to a large covered pot. Add the rest of the water and cook over low flame. Add salt. While the millet is cooking, heat the coconut oil and ghee in an iron skillet over low flame. Once the oil is heated, add spice mix and *garam masala* and sizzle for a few minutes, until the spices become fragrant and lightly browned. Add the tempered spices to the cooked millet and stir for 5 minutes over a medium flame. Next, add the fresh ginger and jaggery, stir and simmer for a few minutes until uniform consistency is attained and the meal is no longer watery.

Note

Soaking the whole millet overnight will reduce the pressure cooking time; however, amount of water will then need to be reduced.



Whole Millet Jowar

48 servings of one cup

Prep Time ~ 45 minutes

Cooking Time ~ 90 minutes

Ingredients

8 cups hulled whole sorghum (jowar)

28 cups water (3½ times the millet)

3 Tbsp coconut oil

1 Tbsp ghee

2 Tbsp simple spice mix

2 Tbsp freshly grated ginger

1 tsp *garam masala*

1 Tbsp finely shaved or liquid date jaggery (optional)

1 Tbsp salt

Directions

Pick through the sorghum. In the pressure cooker (or a large pot) dry roast the sorghum over medium-high heat until the grains turn golden and exude a nutty, sweet aroma (approx. 10 minutes). Add 24 cups of water. Cover, seal and bring to pressure. Once up to pressure (takes around 10 minutes over high/medium flame), reduce flame to low and cook for 1 hour. Turn off and release pressure and open the cooker. The millet should be soft. Transfer the contents to a large covered pot. Add the rest of the water and cook over low flame uncovered. Add salt. While the millet is cooking, heat the coconut oil and ghee in an iron skillet over low flame. Once the oil is heated, add spice mix and *garam masala* and sizzle for a few minutes, until the spices become fragrant and lightly browned. Add the tempered spices to the cooked sorghum and stir for 5 minutes over a medium flame. Next, add the fresh ginger and jaggery, stir and simmer for a few minutes until uniform consistency is attained and the meal is no longer watery.

Note

Soaking the whole millet overnight will reduce the pressure cooking time; however, amount of water will then need to be reduced.



Hearty Teff Meal with Romano Beans

60 servings of one cup

Prep Time ~ 60 minutes

Cooking Time ~ 60 minutes

Cooking Ingredients

12 cups teff	¼ cup salt
36 cups water	¼ cup liquid date jaggery (optional)
½ cup ghee	2 cups broken walnut pieces
1 cup freshly grated ginger	2 whole coconuts, freshly grated
1 cup freshly grated turmeric root (if available)	1 Tbsp freshly ground neem flowers (optional)
1 cup simple spice mix	2 bunches cilantro, chopped
24 cups Romano green beans cut into small pieces (~1 cm or ½ inch)	2 bunches parsley, chopped

Tempering Ingredients

2 Tbsp ghee	1 Tbsp <i>garam masala</i>
2 Tbsp coconut oil	24 curry leaves
¼ cup <i>panch phoran</i>	

Directions

Place the teff into water in a large thick bottom nonreactive cooking pot capable of holding 60+ cups of water. Bring to a gentle boil. Teff will keep spluttering because of its lightness. Keep the pot covered. Periodically, stir right to the bottom of the pot to keep from sticking and clumping. Meanwhile, spluttering will continue. About ten minutes from the start of boiling, add the ghee and mix. Adjust the flame to low-medium in order to avoid rapid thickening of the teff. Thereafter, add all the spices before teff starts to thicken. Add ginger and turmeric followed by the simple spice mix and stir in to avoid clumping. Now, about 20 minutes after the start of boiling, it is time to add the cut Romano beans. The teff should not become too thick, but just beginning to feel heavy upon stirring. Add salt and jaggery (if available) at this juncture and keep stirring all the way, scraping the bottom. Meanwhile, start the tempering process. Start heating the coconut oil and ghee in a nonreactive skillet over a low flame. Add the walnut pieces to the teff pot and stir in. Now add the coconut and mix well by stirring with both hands. Add the neem flowers and disperse. The teff will begin to feel thick at this point in time.

Once the oil for tempering is heated, add *panch phoran* and sizzle. Then add *garam masala* and sizzle for a minute or two. Add all the curry leaves and hold cover on top of the skillet to prevent splattering. The curry leaves should not be fried brownish. As the

fragrance is emitting, pour the contents of the skillet into the teff pot and stir vigorously to mix. The teff should not yet have become too thick to stir! Once the tempered spices are mixed in, turn off flame and disperse the garnishing of chopped cilantro and parsley. The teff will slowly settle and become a thick meal.

Note

Teff is a wonder grain of ancient times. It is usually grouped with prominent millets such as finger millet and foxtail millet. The amount of water needed for cooking teff is at least three times the grain quantity. If not using green vegetables in teff cooking, it works to add $3\frac{1}{2}$ times the water with respect to the amount of teff. Both brown and white varieties make easy-to-digest, light and nutritious meals. Teff porridges without the added vegetables are also delectable. It is recommended that ghee can be replaced by coconut oil or any low heat oil (olive oil will work, for example) to be added to the cooking pot to keep the teff meal from becoming dry and lumpy; note that tempering oil still needs to be a high heat oil.



Parwal with Poppy Seeds and Coconut

Serves 24 as a main dish

Prep Time ~ 90 minutes

Cooking Time ~ 60 minutes

Ingredients

About 275 whole *parwal* (pointed gourd)
cut into 1 inch wide pieces against the
length

2 Tbsp mustard oil

¼ cup ghee

1 Tbsp fenugreek seed (*methi*) powder

3 Tbsp simple spice mix

¼ cup freshly grated ginger

6 cups ground white poppy seeds
(about 10 oz are soaked in 3 cups
water overnight and then stone
ground)

½ cup shaved date jaggery

¼ cup salt

6 cups freshly grated coconut
(from 2 small or medium-sized
coconuts)

Directions

In a large size iron wok, heat the mustard oil and ghee over low heat. Add fenugreek (*methi*) powder and gently sizzle for a minute or two. Add *parwal* and sauté for three minutes so that every piece of vegetable has a thin coating of oil around it. Add the spice mix, periodically and gently stirring for another 5 minutes. Let each piece of *parwal* be coated with the spices. Add the ginger and gently disperse. Next, add the ground white poppy seeds and cook another 10 minutes over low flame. Add the date jaggery and cook for another 10 minutes. Next, add the salt and continue cooking 10 minutes. Add the freshly grated coconut, cover and simmer for 10 minutes. The vegetable should be tender, yet still firmly holding shape. Serve without delay!

Note

Parwal is one of the choicest vegetables in Ayurvedic cooking alongside *turiya* (ridge gourd) and drumstick (the leaves of the drumstick plant are known as *moringa*, a superfood). Both *parwal* and *turiya* when cooked properly lead to a feeling of blissful poise. Poppy seeds, fresh coconut and ginger make the dish balanced and satiating.



Broccoli Tempered with Nigella Seeds

Serves up to 6 as a side dish

Prep Time ~ 20 minutes

Cooking Time ~ 20 minutes

Ingredients

- | | |
|---|---------------------------------------|
| 3 bunches green broccoli, broken into medium/large flowerets (about 3 dozen pieces); stem can be chopped into 1 inch pieces | 1 tsp ghee |
| | 1 Tbsp <i>kalonji</i> (nigella) seeds |
| | 1 tsp fine grain sea salt |
| 2 Tbsp coconut oil | ¼ cup hot water |

Directions

Wash the broccoli bunches and shake off the water. Prepare the broccoli flowerets by gently snapping and breaking by hand; the stems can be chopped and cut to size. Use an iron skillet that can be covered or a heavy bottom pot for this tempering. Heat the oil and ghee over low to low/medium heat. In a few minutes when the oil is hot, add the *kalonji* (nigella) seeds and gently swirl the pot or skillet to disperse the spice. Notice mild sizzling and fragrance from the spice. This spice preparation phase should be just over 5 minutes. At this time add the broccoli flowerets and the stems and sauté gently and consistently for about 5 minutes until the oil is around each and every piece of the vegetable. There will not be any remnant of oil at the bottom; the broccoli will be coated and will look bursting green. Lower the flame and cover. Dissolve the fine grain salt into ¼ cup hot water and then disperse this salt water uniformly over the vegetables. Gently stir and tumble the broccoli so that the salt is mixed. Cover and simmer to steam the broccoli for about 5 minutes. Turn off flame. The broccoli will still be crunchy and bursting with color and life.

Note

Avoid overly stirring and breaking the broccoli flowerets. When the broccoli is served, the extra nigella seeds falling on the serving plate need not be eaten! During winter months, 2 Tbsp pure mustard oil (brownish golden colour) can replace or complement coconut oil. Salt amount can be either reduced or not used at all; sprinkle of water might still be necessary for the steaming phase!

Life Resource





Art of Life and Science of Longevity

The Veda is known as the most ancient repository of indigenous knowledge. This extant literature is in the Vedic style of the Sanskrit language and is somewhat distinct from the more popular classical tradition of Sanskrit. The Indic Vedic scholars and experts claim that all subjects spanning the arts and sciences have their original source in the Veda. Links and relationships of precepts and concepts in use today have been shown to be rooted in the Veda and its four branches which reveal many references to various aspects of medicine.

The Vedic Sanskrit literature classifies Ayurveda as an *upaveda* or a subsidiary Veda related to Atharvaveda, which is the fourth branch of Veda. Atharvaveda is well known as a repository of healing applications through specific uses of mantra combinations and medicinal preparations. Hundreds of medicinal plants are mentioned in Atharvaveda. The sublime recitations of Atharvaveda Sanskrit hymns harness and harmonize the natural forces and life force, and are known to resolve physical ailments from their causal root level. Ayurveda is deemed to be connected with Atharvaveda as a continuum but is known to provide a more practical paradigm of health and healing.

Ancient Ayurvedic classics that are copiously referred to today are the Charaka Samhitā and the Sushruta Samhitā. Both these principal Ayurveda adepts, Charaka and Sushruta, have mentioned the allegiance of Ayurveda to Atharvaveda. Ayurveda is the science of life and longevity. It is not merely a therapeutic system. Ayurveda is enriched by the original six Vedic spiritual philosophies and bases its foundational concepts of *guṇa* and *doṣa* on Samkhya tenets of consciousness, matter and evolution.

The diagram (first chart in this section) on select Ayurvedic lineages shows Lord Brahmā at the root of the lineages. He discoursed and revealed the entire science of life and medicine in 1,000 chapters each containing 100,000 Sanskrit verses. Thereafter, for the sake of specialization and to properly retain the wisdom, he inspired the division of this body of Sanskrit scriptures into eight major branches (see third chart in this section). Several authentic texts were composed thereafter by adepts and specialists in Ayurveda (see second chart). References to these specialized branches are available in both Charaka Samhitā and the Sushruta Samhitā. However, most of the treatises mentioned (in the second chart) are not available. References to these experts and their works are found in the commentaries.

Much has been lost to historical turmoil and many manuscripts of the extant literature were found in either mutilated form or in disarray. The original dates of writing and compilations are also sketchy. However, Ayurveda is believed to have been practised at least as long as agriculture has been around in the Indic history. Archaeo-genetic data extrapolates the Vedic roots of agriculture to date back 15,000 years. This defies many

prevailing interpretations and commonly held beliefs. Specific weather patterns made possible by the Himalayan Mountains towering in the north sustained the evergreen river valleys, which in turn supported agricultural excellence. This created an ideal environment for practising the Ayurvedic indigenous knowledge. What we rely on today as the authentic Atharvaveda and its subsidiary Ayurveda are definitely as old as the once thriving Saraswati river civilizations which flourished prior to 6,000 years ago.

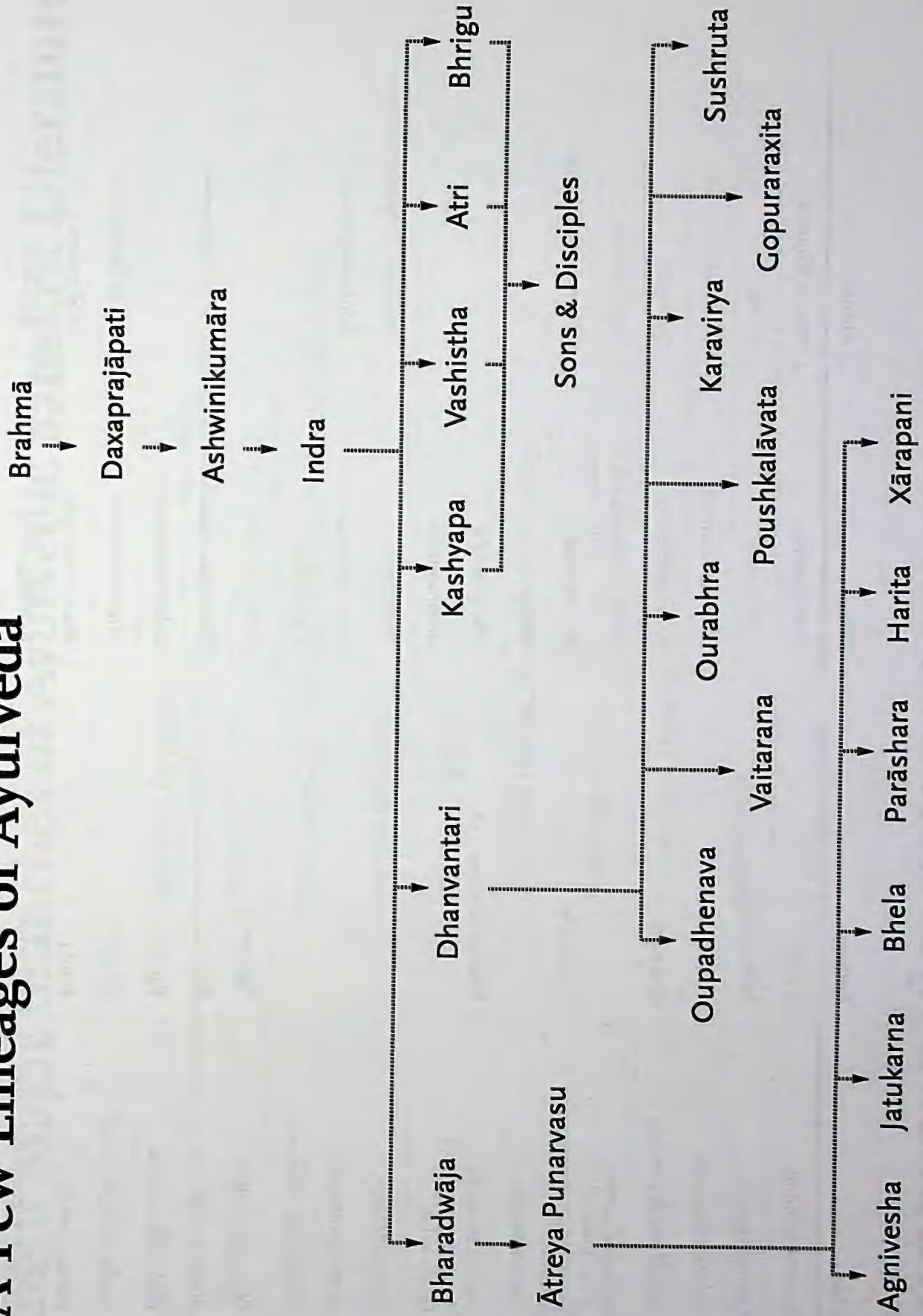
The more recent Charaka Samhitā is believed to be composed by Agnivesha and redacted by Charaka while the subsequent portions were supplemented by Dridhabala, indicating reconstruction in stages. Many authors bear similar names and the original transmission was primarily oral and practice-oriented, thereby complicating the accuracy of written historicity. There are reports of conferences in the Himalayan Mountains duly attended by the great Ayurvedic seers and expert practitioners of this science of health and healing.

It is widely understood that Sanskrit scholars of the medieval period recognized the paucity of coherently presented Ayurvedic texts, especially due to many manuscripts being in disarray, and thus the famous treatise of Ayurveda Saukhyam was compiled. This was a great effort based on reconstruction of texts by coherently linking authentic sources on various topics of Ayurveda. The extent of the effort is discernible in the Ayurveda Saukhyam presented in the large collection called Todarānanda, which means that which delights Todara(malla). The name Todaramalla refers to the royal patron who inspired the scholars and practitioners to make the works comprehensive and dependable while retaining authenticity.

Todaramalla was a great devotee of Lord Krishna and was well known for charity in building temples of worship and consecrating meditation altars. Upon delineating the works under the series Todarānanda, it can be safely assumed that discrete portions were composed by different scholars under the patronage of the noble statesman Todaramalla. Incidentally, the treatise Ayurveda Saukhyam is only one of the 23 recorded treatises of this famous series of works called Todarānanda. Unfortunately, some of these manuscripts are no longer available. The colophon at the end of Ayurveda Saukhyam gives details of dates and historical references to medieval times in India, thereby providing the dating of this treatise. On the heels of such learned works, many lineages that safeguarded the living tradition through their ardent practice and labour of love continued to survive. In recent times, many institutions have tried to systematize the teaching curriculum, however, true success in Ayurveda is dependent upon comprehension of Sanskrit verses in addition to training with adept practitioners.

For the purposes of this workbook, these four charts are merely an introductory inspiration, attempting to represent the ocean of Sanskritic indigenous knowledge on the science of life and longevity. Ayurvedic adepts and experts have given first preference to preventive hygieology both through the classics and treatises. The regime for health emphasizes harmonious daily routine (*dinācharya*) with attendant seasonal adaptations utilizing the rhythms of the life force (*prāna*), the latter being the prime organizer of life as the vital energy.

A Few Lineages of Ayurveda



Well-known Ayurvedic Sanskrit Classics

Title	Author	Title	Author
Brahmā-samhitā	Brahmā	Shālākya-tantra	Nimi & Shounak
Āshwin-samhitā	Ashwini-kumāra	Karāla-tantra	Karāla
Chikitsāsāra-tantra		Shalihotra-samhitā	Shalihotra
Dwaidhanirnaya-tantra	Kashyapa	Sushruta-samhitā	Sushruta
Kāshyapa-samhitā		Vriddhajivakiya-tantra	Vriddhajivaka
Bhāradwājīya Prakarana	Bharadvāja	Bāla-chikitsā	Kumarabhrityāchārya
Bheshaja-kalpa		Nādi-parixā	
Samnipāta-kalika	Dhanvantari (second)	Arka-prakāsha	
Dhātu-kalpa		Udesha-tantra	
Roga-nidāna		Agada-tantra	Kashyapa, Brihaspati, Ushana
Vaidya-chintāmani		Rasa-ratnākara	Siddha-Nāgārjuna
Dhanvantari-nighunta		Kaxa-putnam	
Agnivesha-tantra	Agnivesha	Ārogya-manjari	
Bhela-samhitā	Bhela	Rasendra-mandala	
Parāshara-samhitā	Parāshara	Siddha-nāgārjuniya	
Jatukarna-kāyāchikitsā	Jatukarna	Charaka-samhitā	Ātreya Punarvāsu
Hārta-samhitā	Hārta	Mādhava-nidāna	Mādhavakara
Xārapāni-kāyāchikitsa-tantra	Xārapāni	Ashtānga-hridaya	Vāgbhata

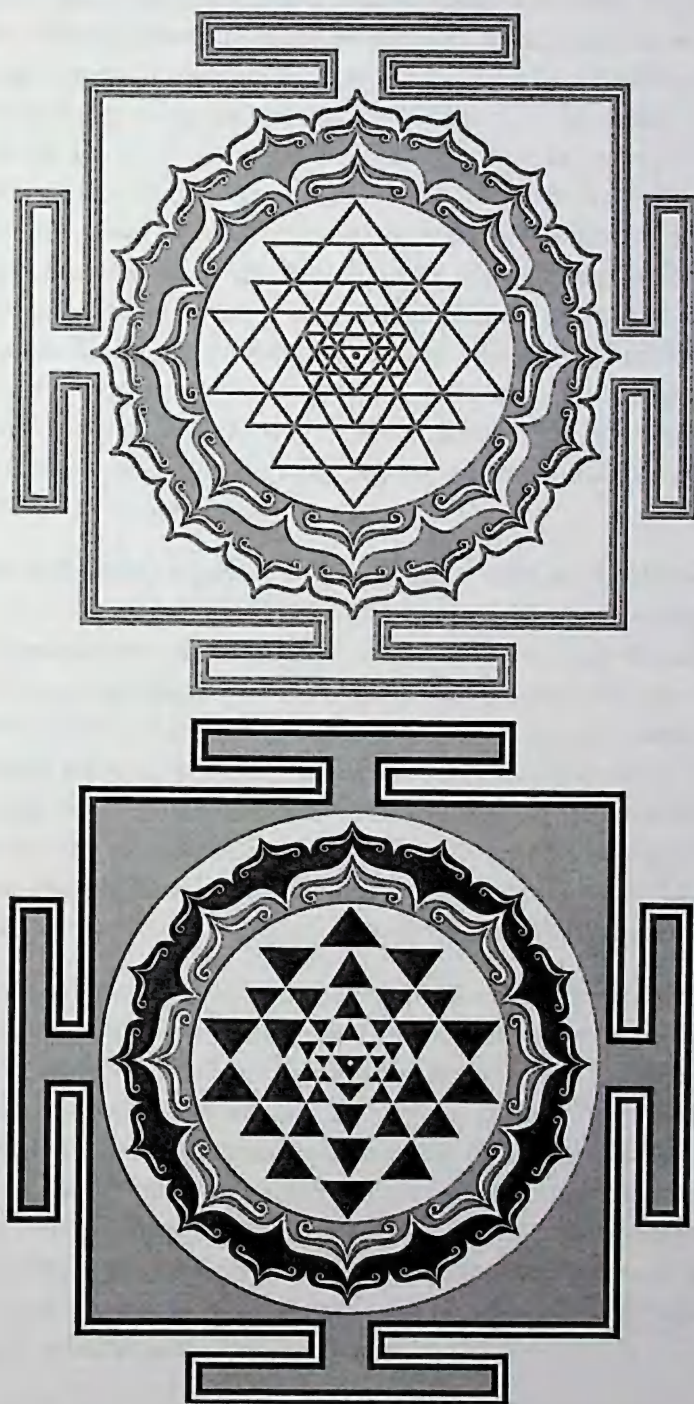
Eight Major Branches of Ayurvedic Sanskrit Literature

Branch	Subjects Covered
Shalya-kriyā	Surgery
Shālākya-vidyā	Ophthalmology, Rhinology, Dentistry, Oropharyngology, Otology
Kāyā-chikitsā	Internal Medicine
Koumāra-bhritya	Neonatal, Pediatrics
Bhuta-vidyā	Ceremonial Healing, Psychiatry, Microbiology
Agada-tantra	Toxicology
Rasāyana-tantra	Rejuvenation, Memory, Immunology
Vājīkaraṇa-tantra	Aphrodisiacs

Eight-fold Classification in Ayurveda Based on Diagnosis and Treatment

Category	Subjects Covered
Sutra-sthāna	Treatment; medicines; duties of physician
Nidāna-sthāna	Description of diseases
Vimāna-sthāna	Functional intelligence; clues to diagnosis
Sharira-sthāna	Surgery; pregnancy
Indriya-sthāna	Sensory malfunction and its causes
Chikitsā-sthāna	Principal treatment procedures
Kalpa-sthāna	Revitalization + rejuvenation + anti-ageing effects
Siddi-sthāna	Preventive measures; <i>pancha-karma</i> + <i>shat-kriyā</i>

Life Fellowship





Fellowship as a Nonprofit Teaching Forum

Putting the mission into practice



One of the primary goals of the United States nonprofit organization Self Enquiry Life Fellowship is to disseminate to seekers and devotees gems of ancient Sanskrit-based wisdom of the unbroken Vedic heritage.

Our aim is to establish a lasting legacy in the West by preserving the indigenous knowledge of the ancient Sanskrit tradition for the benefit of modern society. Fellowships are one of the main methods by which we make Sanskrit-based teachings available to the public. These fellowships invoke the traditional Sanskrit method of learning known as *shruti* or intent listening. We believe in high quality oral transmission and first-hand training. However, the teachings of the oral tradition and direct training are supplemented with vintage photos and antique art prints wherever applicable during the publication process. This not only accentuates the traditional oral interpretations of Sanskrit tenets, but allows the beauty of truth to be expressed by vivid imagery. This visual supplementation of the original *shruti* method of teaching then binds the publication together for current and coming generations who are growing up to be more visual.

Self Enquiry Life Fellowship is guided by the monastic wisdom of the Swamahiman mission to preserve the ancient Sanskrit knowledge base. The authenticity of the teachings is safeguarded by a team of Vedic monks linked with the Swamahiman mission who hail from among the most ancient unbroken monastic lineages of the world. The dissemination of extant literature, meditative arts and historical archives is embellished with meditative insights by these adept and erudite Vedic monks. The saintly monks who research historical Sanskrit literature are seamless in their scholarly interpretation of cardinal Sanskrit philosophies. What is taught has not only retained a sound philosophical basis grounded in a time-honoured Vedic heritage, but is also based on a living practice as part of the unbroken Himalayan adepts tradition.

This workbook is a practical example of sharing wisdom, in this case Ayurvedic wellness practices and Atharvaveda wellbeing wisdom from Sanskrit texts and manuscripts. The workbook makes sublime teachings available in English to facilitate the transmission of this wisdom in the West. By following these guidelines, the reader will develop an understanding of balanced lifestyle and sustainability while living in closer harmony with both nature and the cosmos. Studying the workbook will also give an understanding of: life force (*prāna*) as vital energy; the importance of a soli-lunar biorhythm; your unique mind-body constitution; Ayurvedic wholesome meal planning; yoga stretching synchronized with breathing; and mending the mind and body through mindful and conscious living.

⇒ *Impact of transmission*

The nonprofit Self Enquiry Life Fellowship has made a profound impact through its services and curriculum of public lectures, fellowships, workshops and retreats. The Nonprofit has offered on average more than two public events (primarily free of charge) per month since its inception. There have been a number of events on wellness and wellbeing leading to carefully structured programs on mindful living.

In addition, regular monthly livestream video teachings train an international audience on the meaning of ancient Sanskrit verses of spiritual philosophy and the values of high thinking. The livestream is watched by seekers, friends and families from their homes in many parts of the world including the USA, Europe and Asia.

Most of the fellowships are recorded live on both video and audio. These recordings are an invaluable repository of indigenous knowledge and we continue to grow our library. From this library of recordings, several audios and videos have been published and many more are in the pipeline. We also plan to make these recordings available via streaming through our website. A key part of our website featuring our publications on healing music, vintage artwork, antique photos and wisdom teachings is presented at teachings.swamahiman.org.

The Fellowship Archives project is coming to fruition and we currently house hundreds of vintage prints and digital images related to the Sanskrit lore. We plan to continue expanding our archive collection with the idea of sharing these treasures. We have already begun the process of digitizing and preserving these art pieces and artifacts and will continue our work of cataloguing, research and preservation. Looking ahead, we plan to make a database of these images available online to the public through our website for the sake of inspiring current and future generations.

We still have much to achieve in our mission of exchange and sharing. A shortlist of some of our goals yet to be realized include: publication of several books, publication of Sanskrit chanting libraries, publication of a series on Vedic classical music, and the launch of a new content-rich, navigation-friendly website which will feature subscription-based digital streaming as well as online courses. Our long-term goal is the establishment in the USA of a Vedic centre for sustainable living from where we can conduct training, workshops, retreats, Vedic fire ceremonies and other activities that directly support our mission. The future centre we envisage will include a meditation temple, resource library, suitable land for Vedic organic farming, a centre for Ayurvedic wellness, and an archive vault to house and display our collection of ancient Sanskrit manuscripts, vintage photography, Vedic fine arts and other heritage relics.



Welcome to the Full Spectrum Light and a Host of Colourful Possibilities

Philosophical description of name & logo

Swamahiman

One who is reposed in the Self

Swe Mahimni Samāsate

The One who is the receptacle for the many,
reposes in One's own Self-resplendent glory



Self Enquiry Life Fellowship is the forum where a server, a seeker and a devotee cultivate the common ground of spiritual purpose and explore the mysteries of life and yonder. Meditation, wellness and spiritual lifestyle help define the path of subtle inquiry. Fellowships form the core method of disseminating and sharing the precious teachings.

Fellowship literally means “association with being” and has a time-honoured tradition as a teaching method. It is an assembly of good company that fosters fellowship-in-truth. A **Fellowship** invokes recognition of one's true nature. It imparts noble teachings in silence and through words of wisdom. A **Fellowship** helps to remove attachment to worldly objects and calms the mind. This method of communion is considered very suitable for the seeker to develop clear and discriminative understanding. A **Fellowship** brings about a direct experience of divinity.

Logo Colours. The logo evokes the vision of the coruscating golden Sun solitarily rising in the clear blue skies, melting the clouds away and leaving behind an aurora of resplendent colours on the horizon. The Sun is the light of the soul, self-lit on its own amidst the vastness of blue that symbolizes the expanse of mind. The colour logo is based on the two primary colours of gold and sky-blue, with two secondary colours of crimson-red and white.

Personification. In Sanskrit, the motto of the logo “*Swe Mahimni Samāsate*” means “The One who is the receptacle for the many, reposes in One's own Self-resplendent glory.” Thus, while the logo in its colours and shapes represents the divine persona of Swamahiman, its expression symbolizes the spiritual aspirations of ardent servers,

seekers and devotees. It is urging us to let our spiritual life take lotus like roots, expressing sublime beauty while remaining detached from the murky world, ready to take off at any moment bearing the flight of the swan and thus merging into the essence of Being.

White. The white swan is agile even while reposed on a fully blossomed red lotus. The white colour represents spiritual purity and is also symbolic of merging. A highly realized soul is identified in Sanskrit scriptures as the Paramahansa or literally, "the great swan." The white swan is fabled to be astutely discriminating while absorbing only the essence, as in merely drinking the milk even when mixed with water. Ready to fly gracefully and float effortlessly, it is able to merge into the being-ness of all. In this logo, the swan also symbolizes the *Shiva* characteristic or the auspicious aspect.

Red. The red lotus represents abundance and beatific expression of creation. Metaphorically, it hints at continuity and sustenance, as the lotus is known to regenerate and multiply. The nine upward petals and nine downward petals, totalling eighteen, are symbolic of victory or exalted spirit. The colour red also symbolizes fertility in its nubile expression, awaiting manifestation of the plenitude in nature. The lotus is also known to be the seat of individual subtle beings of the divine abodes. Born from the murky depths of the pond, the lotus embraces the soothing Moon and the refulgence of the Sun; it is steeped in love without even leaving its place. A chalice opens up to gather the shining glory, trickling tiny water pearls of grace from its abode when the stem dances to the rhythm of the Divine. In all of this, the water does not wet the lotus leaf; the mud does not dirty the stem; wind does not wither the beauty of the lotus bloom. The lotus remains unfettered by its surroundings. Firm in the face of a storm and yet tender and humble by its bending, a lotus does not even get wet by the water it lives in. In this logo, the lotus is also symbolic of the *Vishnu* characteristic or the thriving palpable aspect.

Gold. The rising golden sun represents self-refulgence and the light of knowledge. Here the colour gold also represents the tangible. It symbolizes the most precious metal among cultivated wealth. It is a symbol of purity. It glorifies a heritage and indicates old wealth, as in ancient treasure. Gold is the treasure trove of legacy, our precious precipitated wealth. It is hard as well as soft, solid as well as flexible. It symbolizes divine motherhood and her radiance. The golden yellow hue represents self-resplendence.

Blue. Below the lotus, the blue represents the intangible. Blue is the depth of yonder and the unknown, as in the blue of the limitless sky. This colour symbolizes the mystery of yonder. The blue of the water portrays divine love and subtle feelings. The word blue is also used to measure human excellence in entrepreneurship and investment. From deep space Mother Earth looks blue, and hence is often called the Blue Planet. Here, blue beholds the tangible in its own intangible abode.

Black. The looping black serpentine border with five hoods symbolize the cosmic link that ties in the visible part of our world with the invisible parts, and is aptly called in Sanskrit as *Ādisheṣha* or the end looping into the beginning, also symbolizing the cyclicity of time.

Heart. The ellipsoid *lingam* encapsulating the swan and the lotus is representative of the emerging form in the formless, just about to reveal the duality of creation but retaining the expansive mind amidst tangible creative expressions. Furthermore, the *lingam* depicts the causal body or the subtle heart in its shape; symmetrical along the axes and shaped like a grape. The imaginary outline connecting the names and motto surrounds the *lingam*, forming a pitcher – a pot filled with divine nectar imbibing an elixir of knowledge and steeped in love. Even though the gold colour represents the tangible and precipitated aspects, it is shown radiating in the rising Sun and its aura. The blue colour, otherwise representing the intangible and the vastness of mind, is captured in the water below. Thus the placement of colours with respect to the degrees of tangibility is switched. This reverse juxtaposition metaphorically expresses the symbiosis of the dual expression of the unified spirit of Being, Knowing and Love.





Swamahiman Base 10

*Inspirational Concepts Based on the Logo of the Nonprofit for
Volunteers and Friends Interested in Nurturing the Cause*

☞ *The Golden Radiance*

Honour the Heritage. The heritage of your organization is precious and will be better preserved if you become the promise it beholds. Honour the precious heritage that your organization strives to protect. Reprioritize for the sake of turning over a new leaf, for refocusing on what we really care about, and for refreshing our commitment to good works. As an ideal volunteer, support the original articles or charter of your organization. Be the rekindling radiance like the Sun in all gatherings and in every situation. And thus be the noble influence without appearing imposing. Sharing love through kindness and charity never fails.

Revisit the Vision. Reviewing the organizational vision will keep you enthusiastic, focused, and results-oriented. Ponder on why you really care about this cause and this organization; study the goals. Fuel the flames of your energy through a deeper understanding about your organization's mission. You will be greatly inspired when you see the results your organization is creating in people's lives. Be prepared to gently shake up the stuck energy of a status quo, and bring about a dynamic approach for the future without being held back due to past stagnation. Be ready to analyze, adapt, and adjust without compromising the founding principles.

☞ *The Blue Depth*

Think Deep. You are going to better the world, preserve the heritage, uphold the tradition, honour the environment, and motivate your community by deep thinking. Recognize the great power in your noble intent that brings your organization's vision to life. With the right approach, you will attract the right servers along with ample resources for the common cause. A positive attitude is everything when you are reaching out and manifesting a greater reality.

Be Calmly Proactive. Your organization provides you with an opportunity to serve. This platform is an outlet to practise your noble intentions. Your organization will not cultivate plenitude if you remain disengaged. Be wisely proactive and be a part of the solution. This service avenue allows you to practise all of the cardinal values precious to you. Your organization needs more than talk from you. Don't attend fellowship meetings to pontificate a bit. Look for projects you can take up to nurture the cause. Think through and ask how you can participate by being part of an action plan; do not simply offer to help.

卐 The Red Lotus

Spread the Word. Noble ideas based on profound concepts easily spread from seeker to seeker. Cultivate a network of good humming about your organization. All your friends, family and associates might benefit from knowing about your compassionate involvement in your cause. So introduce the organization to your friends who may be interested. Invite others to join the cause and inspire them to support the cause. Show them the good work your organization is doing. Many seekers will be engaged through your noble deeds. A polite request for support of this noble cause is always worth your effort. Let your grassroots efforts blossom and take shape.

Strive for Performance. A structured and a well-planned outreach are essential whenever service is disseminated. An infrastructure that caters to the shared organizational vision and channels the work will rely on capacity staffing. A staff is able to dedicate committed time and shoulder responsibilities that are time-bound. They are compensated to streamline your collective charitable intent. Serve alongside staff and share your enthusiasm. Motivate them to improve their efficiency. The committed staff is carrying enormous responsibility on your behalf. Communicate effectively with them in a timely manner. Trained staff will perform at a higher level when supported by a good volunteer base. Ultimately, it is your organization that will thrive and spread the good work.



卐 The White Swan

Be Positively Optimistic. Negativity is self-defeating and deadening. Eradicate the naysaying and handwringing. Do not allow gossip to waste time and wipe out energy. Any negative thought can deaden momentum. Jealousy derails volunteering or seeking before they have even begun. Hold onto your own grace with a positive demeanour. Infect others with your silent smile while participating. The joy of participation does not seek personal rewards. Uphold the honour code of volunteering and accumulate the merits just by participating with a positive spirit. Let your service unfold and take flight.

Communicate Clearly. Even as a hands-on volunteer, most of your donated time and energy will be spent on communication. Clear communication channels are necessary to bring time-bound projects to fruition. Email is often labeled as having become its own worst enemy. Do not be frivolous with email; instead exercise a patient caution. Never tinge your communication with hidden emotion, whatever the medium. Emotional intelligence is better used to recognize the sensitivities involved. Respectful and honourable words depicting the clarity of purpose are the benchmark of effective communication. Objective structure supplemented by point-wise summary grabs attention. Clean and revise the subject line! Of course, articulation using optimal words makes way for a prompt understanding.

≡ The Cosmic Link

Stay Connected. The middle path is of balance. A balanced mind is clear in all situations and understands the connectivity in nature. The microcosm is a miniature macrocosm. This is because all energy is linked. All of matter is tied together. Our willpowers overlap as minds comprehend the intricate connections. Match your intention with the vision of the organization. Become allied and aligned with the great power that is subtly behind this organizational entity. Understand that your link is crucial and beneficial. By apt volunteering on behalf of your favourite organization, you will help to transform the world for the better. Every joint is important to the overall link.

Close the Loop. Be the exemplary volunteer who has the point of view of abundance rather than scarcity. Make your own personal gift to support your organization whenever feasible. And encourage other donors to give in kind. Don't short-circuit your credibility. Be willing to cultivate goals and then follow through on commitments. If you believe that charitable giving breeds more to share, it will become easier to cultivate donors. Your organization needs wealth to sustain its programmes. The pure charitable intent of donors will generate a longer-lasting momentum. And your ability to close the loop of tangible giving with intangible blessings will help sustain the momentum.



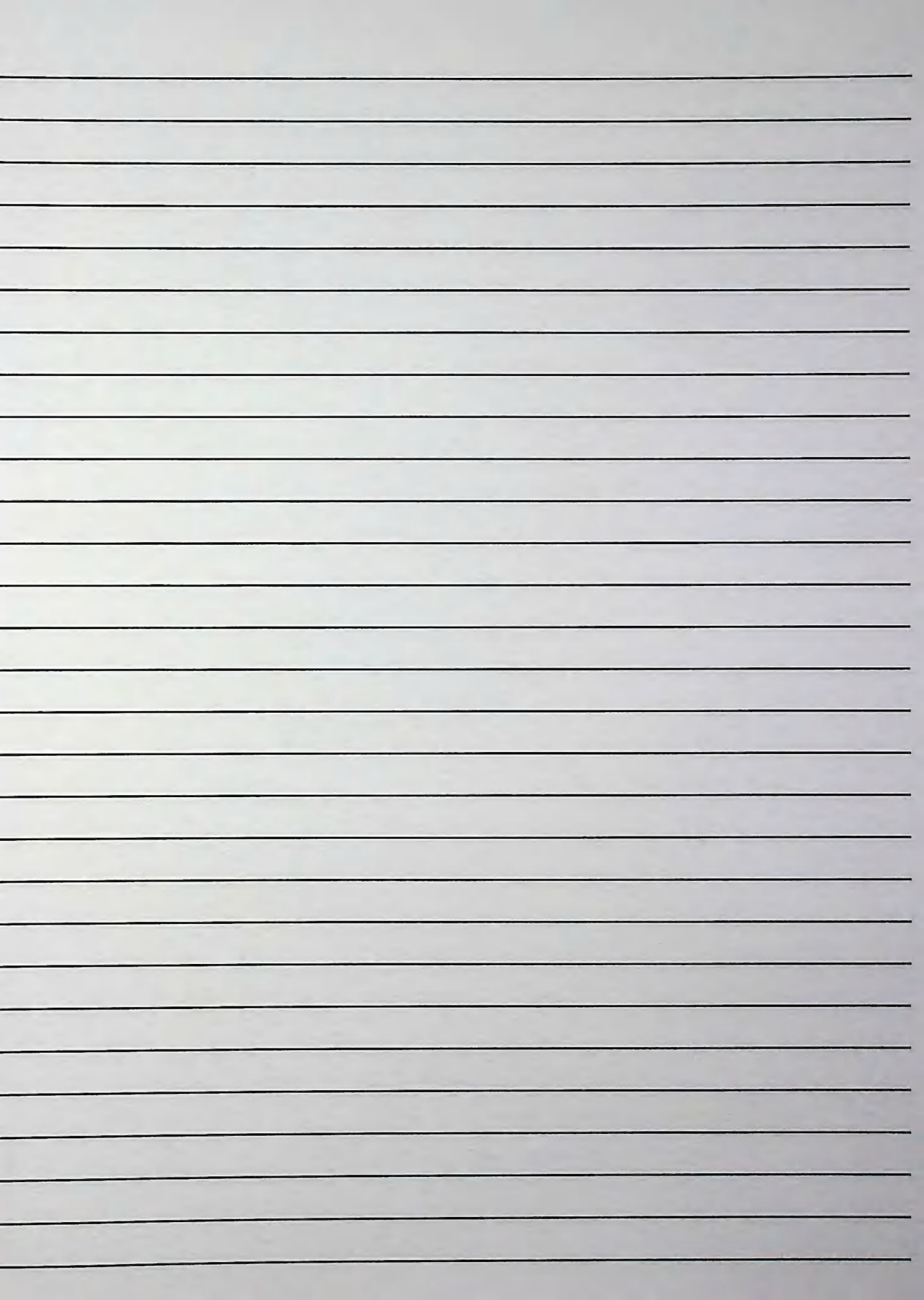


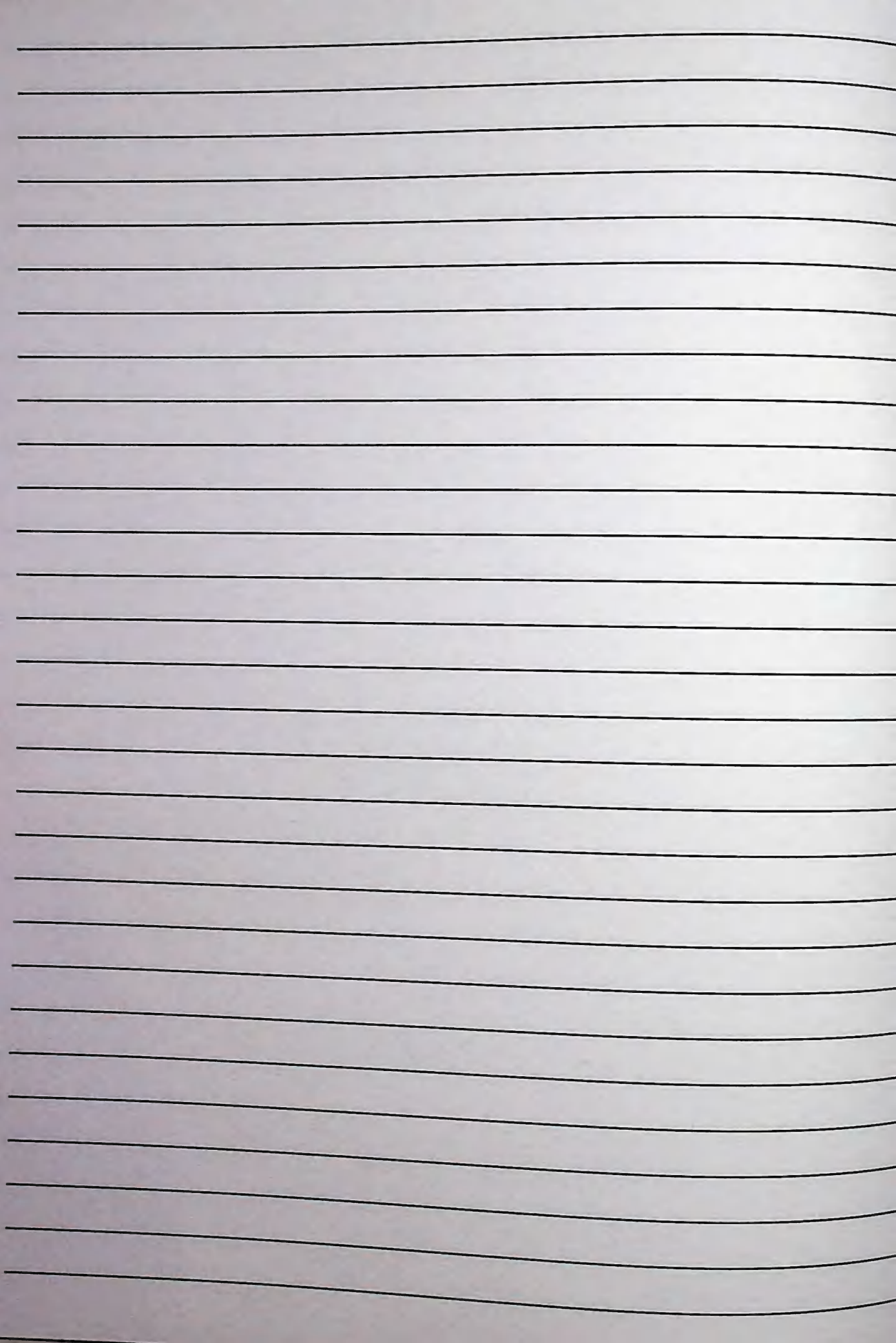


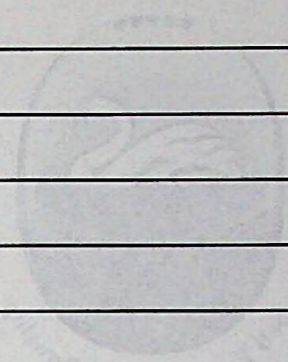












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